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The Legacy of America's "Forgotten Warriors:"

an Analysis of Dysfunctional Relational

Communication Among Vietnam Combat Veterans Exhibiting Posttraumatic Stress Disorder Symptomatology.

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The legacy of America's "forgotten warriors:" An analysis of dysfunctional relational communication among Vietnam combat veterans exhibiting posttraumatic stress disorder symptomatology

Rogers, Jack Eugene, Ph.D.
The Louisiana State University and Agricultural and Mechanical Col., 1994
THE LEGACY OF AMERICA'S "FORGOTTEN WARRIORS:" AN ANALYSIS OF DYSFUNCTIONAL RELATIONAL COMMUNICATION AMONG VIETNAM COMBAT VETERANS EXHIBITING POSTTRAUMATIC STRESS DISORDER SYMPTOMATOLOGY

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

The Department of Speech Communication

by

Jack E. Rogers
B.A., McNeese State University, 1983
M.Ed., McNeese State University, 1985
May 1994

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DEDICATION

In the New York Times bestseller, We were soldiers once . . . And Young, Lt. Gen. Harold G. Moore (Ret.) and former war correspondent Joseph L. Galloway wrote "In battle our world shrank to the man on our left and the man on our right and the enemy all around." There is an old saying credited to Lt. Gen. William T. Sherman, familiar to every soldier, that 'war means fighting and fighting means killing. War is Hell.' The Vietnam Conflict was and continues to be a private Hell -- a human tragedy whose emotional fallout continues to impact the lives of tens of millions of veterans, their wives and children.

When the Vietnam veterans returned home, the enemy all around, of which Moore & Galloway wrote, became those who sent them. "In many ways, the Vietnam veteran has borne the burden of our national shame, guilt and confusion regarding the Vietnam war." Dr. Aphrodite Matsakis continues in her book, Vietnam Wives, that "(M)any mental health professionals, historians, and social commentators view what happened to the Vietnam veteran the first five years after the war as a national tragedy." In collecting data for this work, one veteran wrote that "(T)he past two decades have been spent in an agonising (sic) search for that place I left at 17 called home." Perhaps, Penk & Rabinowitz (1987) summed it up best when they wrote, " . . . one way we can have peace is to remember what happens after war."
This work is respectfully dedicated to the Vietnam veterans and their loved ones who opened their hearts, swallowed their fears, and gave this stranger access to their own private Hells. For too many, the enemy is still all around. They fight the war everyday. The casualties continue to climb. There is hope, but it only comes through understanding. Perhaps, this work is a sincere step towards that understanding. Thank you for your sacrifices: when it was your time to serve your country and when it was time to share your stories.
ACKNOWLEDGEMENTS

It has been said that "Only God truly creates alone." This work would not have been possible without the sincere commitment and dedication of a very special cadre of people. Over five years went into the creative process of this monograph. Every step in the process was guided and directed by others.

Bill Casey, McNeese State University's Director of Forensics for over thirty years, contributed to this work by redirecting the author's career path and continually providing focus. "Finish that Ph.D.," was always the first and last message uttered by Mr. Casey in any conversations with the author.

Dr. Barry Moser and Ms. Lillian Cutshell of LSU’s Department of Experimental Statistics served as statistical consultants. Without their attentive direction this project would never have reached a valid conclusion.

Dr. Madeline Uddo-Crain, Department of Psychology Service with the Veterans Administration Hospital in New Orleans, provided invaluable assistance through her insightful experiences in working with PTSD-positive Vietnam veterans. Dr. Uddo-Crain illuminated many dark corridors and provided the guidance necessary to work around the emotional pitfalls of working with this special group of people.

Dr. J. Donald Radsdale, Department of Speech Communication, Louisiana State University, gave more than any major professor would be expected to give. This was not an easy dissertation.
Many times throughout the process the special circumstances of the research population threatened the viability of this work. Dr. Ragsdale's personal commitment to this research and his concern for the author were often the difference between giving up on this project and struggling towards completion. His insight, guidance and direction are the epitome of what it is to be a mentor. This monograph is as much his as it is mine.

Christine Rogers, my wife, without whom this monograph would not exist. Goffman and others have posited that "(W)e are what others believe us to be." It is true, then, that the love of others gives us the courage to believe in ourselves, our visions and our abilities. In addition to spending countless hours reading and checking data, proofreading and correcting rough drafts, and providing focus that only someone outside of the work could offer, she believed in my vision. She shared her energy, her commitment, and, at times, her shoulder. Without her love and encouragement, I never would have been able to finish this monograph.

Finally, credit for this work should go to LTC Thomas Dugan who was listed as Missing-in-Action on December 13, 1968. I never knew you, but I wore your POW/MIA bracelet until the day the military that sent you made me remove it. I searched the papers, looking for your name among those returning from captivity in North Vietnam, but you never came home. I promised myself that I would not forget you. Your constant presence in my mind helped me to finish this work. I never knew you, but you
are a part of all that I am. Though I cannot look into your eyes and say it, thank-you for your sacrifice.
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ABSTRACT

The literature has long reported the atypical stress-producing characteristics of the Vietnam conflict. For veterans still suffering from the psychological and emotional "fall-out" of war-related anxiety, one long-term adjustment dysfunction is the difficulty PTSD-positive veterans experience in sustaining successful interpersonal relationships. Competent dyadic communication plays a critical role in engendering positive relational trajectories. This study investigated the hypothesis that posttraumatic stress disorder would exhibit a correlational relationship with the relational communication topoi of intimacy and dominance/control. A cross-regional sample of 218 PTSD-positive veterans and their relational partners provided data. Scale construction and validation was achieved through orthogonal factor analysis with varimax rotation. The resulting factor structure confirmed an interdependent relationship between the relational topoi of intimacy and dominance/control for this population. This study provides empirical evidence that a strong correlational relationship exists between PTSD symptomatology and difficulties in accessing communication strategies which engendered feelings of intimacy reflected through an overall decline in intimacy and relational satisfaction. A correlated relationship was reported between PTSD and the use of communication strategies designed to dominate or control the communication exchange. This relationship was much
stronger for relational partners than for the veterans. PTSD-positive veterans were more reticent to abandon communication strategies which were designed to retain control or dominate the exchange than their relational partners. Finally, implications for the extension of communication research into the impact of stress on relational communication are discussed.
CHAPTER 1

INTRODUCTION AND REVIEW OF LITERATURE

"Perhaps one way we can have peace is to remember what happens after war," (Penk & Rabinowitz, 1987).

1.1 Introduction

Between the Gulf of Tonkin Resolution in August, 1964, which formalized the United States' entry into the Vietnam Conflict, and the general withdrawal of American forces in March, 1973, the U.S. Government sent 2.7 million troops to Southeast Asia (Brown, 1984; Broyles, 1986; King & King, 1991; Management Brief, 1980). The goal of protecting South Vietnam from Communist control proved to be in vain as the last Americans left in evacuation during the fall of Saigon in April, 1975 (Brown, 1984). At the peak of American involvement in 1968, roughly 1 out of every 8 soldiers was assigned to a combat unit. Some 57,661 Americans died in Vietnam. Approximately 303,000 more were wounded, 150,000 requiring hospitalization. Another 75,000 were classified as disabled as a direct result of their participation. Over 5,000 lost limbs, with over 1,000 sustaining multiple amputations (Baskir & Strauss, 1978; Broyles, 1986; King & King, 1991; Matsakis, 1988). 2,493 remain unaccounted for or missing in action.

Staggering numbers, in terms of sheer physical destruction and suffering, but after more than twenty years, these finite statistics
may prove less far-reaching in their impact than the casualties which continue to be engendered through the emotional and mental scars left by the prosecution of a just war. For untold thousands, the war is not over. It has left its mark, its legacy on our returning veterans: posttraumatic stress disorder is the legacy of America's "forgotten warriors."

When President Gerald R. Ford urged the American people to put the Vietnam Conflict behind them (Public Papers of the President, 1975) Americans subsequently acted to ignore Vietnam veterans, making them the "forgotten warriors" of a generation (Brown, 1984; Stretch, 1985; Wilson, 1978). Many health professionals, historians, and social commentators view what happened to the Vietnam veteran the first five years after the war as a "national tragedy" (Matsakis, 1988). 58,000 American soldiers died in Vietnam, but many more are dying emotional and spiritual deaths here at home.

NVVRS (National Vietnam Veterans Readjustment Study, 1988) findings indicate that 15.2 percent of all male Vietnam veterans are current cases of PTSD. This represents about 479,000 of the estimated 3.14 million men who served in the Vietnam theater (Persons who served on active duty in the U.S. Armed Forces during the Vietnam era -- August 5, 1964 through May 7, 1975 -- in Vietnam, Laos, Cambodia, or in the surrounding waters or airspace of one of these three countries). Among Vietnam theater women, current PTSD prevalence is estimated to be 8.5 percent of the
approximately 7,200 women who served, or about 610 cases. For both males and females, these rates of current PTSD for theater veterans are consistently and dramatically higher than rates for comparable Vietnam era veterans (2.5 percent male, 1.1 percent female) or civilian counterparts (1.2 percent male, 0.3 percent female). Vietnam era veterans are defined as persons who served on active duty in the U.S. Armed Forces during the Vietnam era but did not serve in the Vietnam theater. An additional 11.1 percent of male theater veterans and 7.8 percent of the female theater veterans (350,000 additional men and women) currently suffer from "partial PTSD." That is, they have clinically-significant stress reaction symptoms of insufficient intensity or breadth to qualify as full PTSD, but may still warrant professional attention.

NVVRS (1988) analysis of the lifetime prevalence of PTSD indicate that over one-third (30.6 percent) of male Vietnam theater veterans (over 960,000 men) and over one-fourth (26.9 percent) of women serving in the Vietnam theater (over 1,900 women) had the full-blown disorder at some time during their lives. Thus, about one-half of the men and one-third of the women who have ever had PTSD still have it today. These findings are consistent with the conceptualization of PTSD as a chronic, rather than acute, disorder.

Although most Vietnam veterans have adjusted well (Card, 1983, 1987; Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar & Weiss, 1988b; Ursano, 1981), it is conservatively estimated that from 500,000 to one million veterans (roughly 20%) still suffer
significant adjustment problems linked to war-related anxiety or posttraumatic stress disorder (PTSD), as it has become known (Brown, 1984; Center for Disease Control, 1988, 1989; Egendorf, Kadushin, Laufer, Rothbart & Sloan, 1981; Foy, Sipprelie, Rueger & Carroll, 1984; Goodwin, 1980; Kaylor, King & King, 1987; Kulka, 1988a, 1988b; Laufer & Gallops, 1984, 1985; Wilson, 1978). Some experts place the number affected as high as 40-60% (Wilson, 1980b).

While experts disagree over the actual numbers of PTSD cases, since 1969, over 600,000 Vietnam veterans have sought government help for readjustment difficulties. Nationwide, Vet Centers treat about 15,000 vets a year and an additional 28,000 are in treatment for PTSD in one of the nation's 172 Veteran's Administration Hospitals, thirteen of which have special PTSD units (Matsakis, 1988).

To qualify for treatment under the clinical diagnosis, a veteran with posttraumatic stress disorder will: 1) have a history of trauma; 2) find themselves re-experiencing that trauma in the form of such things as dreams, flashbacks, and intrusive memories; 3) experience a number of emotions and reduced interest in others and in activities in the world; and 4) have at least two of the following symptoms -- difficulties with memory and concentration, sleep disturbances (nightmares or an inability to fall asleep soundly), hyperaltermness (the startle response), or avoidance of people, places and activities which arouse memories of the
traumatic event (Diagnostic and Statistical Manual of Mental Disorders IIIR, 1987).

Basically, PTSD is a normal reaction to an abnormal amount of stress (Matsakis, 1988). That reaction manifests itself in a number of ways. NVVRS (1988) findings indicate a strong relationship between PTSD and other postwar readjustment problems. In addition to the painful symptoms of PTSD itself, the lives of Vietnam veterans with PTSD are profoundly disrupted in that they experience problems in virtually every domain of their lives. PTSD sufferers routinely identify significant problems in becoming close to others, in expressing intimacy, and often insulate themselves from meaningful relationships (Brende & Parson, 1985; Carroll, 1983, 1985; Egendorf, Kadushin, Laufer & Sloan, 1981; Horowitz & French, 1979). Vietnam veterans report dissatisfaction with, increased conflict within (Parson, 1984; Penk, Rabinowitz, Roberts, Patterson, Dolan & Atkins, 1981; Wilson, 1978) and higher divorce rates for their interpersonal relationships (Laufer & Gallops, 1985; Roberts, 1984).

The literature has documented the powerful moderating influence of post-military social support through spouses and families on present veteran status (Egendorf, Kadushin, Laufer, Rothbart & Sloane, 1981; Figley, 1978; Kadushin, Boulanger & Martin, 1981; Keane, Fairbank, Caddell, Zimering & Bender, 1985). Keane & Fairbank (1984) stress the critical importance of long-term marital and family support in helping the veteran to cope with the
trauma of war. Sadly, for Vietnam veterans still suffering from the psychological and emotional "fallout" of war-related anxiety, one long-term adjustment dysfunction is the difficulty experienced in sustaining the very long-term relationships which offer at least some hope of normality for PTSD sufferers (Carroll, 1983, 1985; Laufer & Gallops, 1985b; Roberts, 1982).

Perhaps, even more tragic are the silent sufferers of PTSD "fallout:" the families. Dr. Aphrodite Matsakis, a psychologist with the VA Center in Silver Spring, Maryland, extends the "forgotten warrior" label to the wives and children of Vietnam veterans. "For them the war never ended, it just came home. They share their lives with veterans afflicted with PTSD. These men -- their husbands, fathers and lovers -- suffer from vivid and sometimes violent flashbacks, chronic depression, emotional numbing, and withdrawal. Some of these men abuse their spouses and children; some turn to alcohol and drugs; some even attempt suicide. And in their suffering, they can destroy the lives of their families (Matsakis, 1988)."

In terms of demographic characteristics, the wives or partners (that is, the person with whom the veteran is living as though married) of veterans with PTSD closely resemble the spouse/partners in the lives of veterans without PTSD, and neither group of women reports major drug or alcohol problems. However, within families where the veteran suffers from PTSD, the spouse/partners report being less happy and satisfied with their
lives and have more general psychological distress (including feeling as though they might have a nervous breakdown) than do the spouse/partners of Vietnam veterans who do not have PTSD. The spouse/partners of veterans with PTSD also report more marital problems and more family violence than is found in families of those without PTSD. Children of Vietnam veterans with PTSD tend to have more behavioral problems, including behavioral problems of clinical significance, than do children of Vietnam veterans without PTSD. Thus, living with veterans suffering from PTSD appears to have a significant negative impact on the psychological status of well-being of their spouses or coresident partners and their children (NVVRS, 1988). Experts have estimated that as many as 900,000 wives and partners and over one million children may be affected. If extended family members were included in the estimate, approximately 4.7 million Americans may eventually need psychiatric help (Lyons, 1985; Matsakis, 1988).

The field of communication research has long recognized certain essential elements or themes within successful interpersonal relationships. Control, trust and intimacy (Millar & Rogers, 1976) are critical in the creation and maintenance of dyadic relationships. The literature has consistently identified PTSD sufferers as exhibiting long-term psychological and emotional problems, which negatively impact their ability to maintain successful interpersonal relationships. They insulate themselves from meaningful relationships (Brende & Parson, 1985), have
difficulty expressing intimacy (Carroll, 1983, 1985; Egendorf, Kadushin, Laufer & Sloan, 1981; Parson, 1984; Roberts, 1982), and regulate the interpersonal distance within the dyad because they fear potential loss (Brende & Parson, 1985). Trust and intimacy are viewed as weaknesses while control is essential to survival (Matsakis, 1988).

The intent of this research is to collect data from PTSD positive, Vietnam combat veterans and their relational partners currently engaged in significant on-going interpersonal relationships. The data will be examined for evidence of dysfunctional relational communication within the Intimacy and Dominance/Control relational dimensions using Judee Burgoon and Jerold Hale's Topoi of Relational Communication Scale (1987). An association between the severity of PTSD symptomatology, as reflected by the veteran's Mississippi Scale PTSD (MSCRPTSD) score, and a correlated increase in negative relational communication will be advanced. Simply put, the higher the degree of sociopsychological maladjustment the greater the difficulty in using communication which engenders feelings of intimacy and the greater the use of messages designed to create a sense of dominance and control.

The data will be analyzed for statistical evidence of significant positive correlational coefficients of greater than .50 which would demonstrate a strong relationship between increased PTSD symptomatology and increased negative communication behaviors. Clinical implications for the understanding and treatment of PTSD
from a communication competency and satisfaction perspective will be advanced.

There are four justifications for this study. First, though the literature points to dysfunctional communication behaviors among PTSD sufferers as one possible explanation for subsequent relational failures, no significant research has been conducted from the communication theory perspective to verify this phenomenon. While any competent communication theorist would argue that a direct relationship exists between the type of communication behavior exhibited by the relational participants and the subsequent relational outcome, this study will establish a firm link between PTSD and dysfunctional communication behaviors; and thus, provide justification for a communication theory perspective within future PTSD research.

Second, the clinical implications for this study are far-reaching. Post-military social support is a powerful moderating influence on present veteran status. However, to sustain successful interpersonal relationships, veterans must be able to communicate effectively with relational partners. If PTSD suffers manifest dysfunctional relational communication behaviors, treatment must include work grounded in increasing communication involvement, competency and satisfaction. Until veterans are taught to communicate effectively, they cannot expect positive relational outcomes. Clinical application in communication is critical to positive relational experiences.
Third, there is a tremendous need for further research within the current climate. While the Persian Gulf War may have been comparatively short in duration and prosecuted at a much lower level of combat intensity than the Vietnam Conflict, no armed aggression can be prosecuted without war-related anxiety. The suicides and marital breakdowns of several Desert Storm veterans over the past several months would seem to indicate a need for further understanding.

Fourth, there are implications for a broader communication perspective in the study of stress. In his seminal work, Selye (1956) not only theorized on the etiological role of stress in the development of physical illness, but he also helped researchers to turn their attention to researching the impact of life events on human functioning within the emotional realm. Daniels (1982) and Klonoff, McDougall, Clark, Kramer and Hogan (1976) argued that the emotional "fallout" from stressful life events may impact a person's ability to function for life.

Combat is only one of the stresses that humans may be exposed to in the course of their lives. Other traumatic life events, such as marital and family breakdown, rape (Burgess & Holstrom, 1974), the issues of death and dying, abortion, debilitating sickness, and natural disasters (Green, Grace, Lindy, Titchner, & Lindy, 1983; Titchner & Knapp, 1976), have been linked to posttraumatic stress reactions. Additional research may demonstrate that these traumatic life events may have a profound effect on competent
relational communication. Demonstrating that war-related anxiety exhibits a positive correlation with dysfunctional relational communication may prove heuristic for further stress communication research.

In the final analysis, however, the most compelling reason for this research is because America owes it to the veterans. Helping them and the families who love and support them to find the answers to questions which they have been unable to answer themselves is the least society can do.

1.2 Review of Literature

The literature has documented the atypical, stress-producing characteristics of the Vietnam Conflict which has contributed to war-related anxiety resulting in posttraumatic stress disorder (Bourne, 1969, 1970a, 1970b; DeFazio, 1975; Helmer, 1974; Laufer, 1981; Laufer & Gallops, 1982, 1985; Laufer, Gallops & Frey-Wouters, 1984; Lifton, 1973; Sanford & Comstock, 1971; Starr, 1973). Five factors, unique to the conflict, have been identified as salient to the creation and exacerbation of stress:

(1) The Vietnam Conflict was the first military engagement where U.S. troops were forced to fight a guerrilla war. The very nature of the prosecution of counter-guerrilla military strategies creates problems unique to the Vietnam Conflict. First, the Conflict was a jungle war fought against a largely indigenous revolutionary
army (DeFazio, 1975). Guerrilla forces moved between civilian and combat roles making it difficult, if not impossible, to distinguish friend from foe (DeFazio, 1975; Brown, 1984). This fact is important because it accounts for the very special character of this war. The specter of being shot at and having friends killed and maimed by a virtually unseen force generated feelings of helplessness, frustration and considerable rage (DeFazio, 1975).

Second, combat troops were subjected to confusing military strategies that included the taking, abandoning, and retaking of the same areas. Victories were measured in terms of violence (body counts) rather than geographical gains (Goodwin, 1980; Carroll, 1983), which left G.I.'s with a sense of helplessness at not being able to confront the enemy in set-piece battles. Its clandestine nature led to considerable brutalization on both sides against civilians and POW's and the use of cruel weaponry (DeFazio, 1975; Laufer, Gallops & Frey-Wouters, 1984). In order to survive, U.S. troops were forced to adopt strategies of extreme violence. Most often counter-guerrilla training encouraged the unleashing of rage against indiscriminate targets (Shartan, 1978). There were no clearly discernible lines of battle. No land was taken and held. Danger was perceived as being everywhere (King & King, 1991).

The prevalence of PTSD and other postwar psychological problems is significantly, and often dramatically, higher among those with high levels of exposure to combat and other war zone stressors in Vietnam, either when compared with their Vietnam era
veteran and civilian peers or with other veterans who served in the Vietnam theater and were exposed to low or moderate levels of war zone stress. This suggests a prominent role for exposure to war stress in the development of subsequent psychological problems, and confirms that those most heavily involved in the war are those for whom readjustment was, and continues to be, most difficult (NVVRS, 1988).

Even the veteran who was not assigned to active duty in a combat role, but who served in Vietnam in a "safe," or noncombat, assignment, experienced fear. Being stationed in a combat zone may in itself constitute a hazard for some people (Lund, Sipprelle & Strachan, 1984). Although the statistical chances of being killed or injured through attack were not as great as those for the veteran who saw combat, the noncombat veteran was also exposed to the horrors of war and the penetrating feelings of fear (Brown, 1984; Goodwin, 1980). Hendin (1981) concluded that the development of stress reactions for noncombat veterans is integrally related to the individual's specific perception of the traumatic experience. Other researchers (Laufer & Gallops, 1985; Boss, 1988) have supported this finding. The climate in Vietnam was one in which it was impossible to feel safe no matter what type of unit one was assigned to or where it was located. As a result, the veteran's individual perception of the situation may have produced feelings of fear, and therefore, post-military stress regardless of actual combat exposure.
The uniqueness of these difficulties (distinguishing friend from foe and unclear, even confusing, tactical mission objectives) has generated a heightened emotional state resulting in penetrating feelings of insecurity, fear and rage. Veterans were frequently described as a chronically angry and violent group (Shatan, 1978; DeFazio, 1978). Solomon (1975) suggested that many of the conditioned inhibitions -- controls for anger and aggressive behavior -- had been reduced as a result of the brutal acts engaged in by the combat veteran. The resulting dysfunction, often referred to as "hypervigilance," makes it difficult for veterans to trust others and creates persistent feelings of isolation, insecurity, and rage (Brown, 1984; Carroll, 1983; DeFazio, 1975; King & King, 1991; Laufer, Gallops, Frey-Wouters, 1984; Shatan, 1978). Further, the survival skills the veteran acquired in the military were often a dangerous liability in coping with the ambivalent reception at home because the automatic tactical nature of counter-guerilla training encouraged the unleashing of rage, sometimes in violent impulses, against indiscriminate targets (Shatan, 1978). Society, and all too often loved ones, became targets of displaced rage and frustration.

(2) Weinstein (1947) argued that resistance to trauma varied with integration into the group. "The nature of modern warfare," notes Weinstein (47, 309), "is such that in order to survive combat, the soldier must function as part of a group, and his resistance to the trauma of combat will vary with the ability to integrate himself with the group." In previous wars, soldiers were enlisted for the
duration and mobilized for deployment in intact units. These units were often made up of soldiers from the same town or geographical location. They trained and fought as a group. Once hostilities ended, the unit was demobilized as an intact force and sent home as a group. This provided veterans with a "ready-made" support group which could be turned to in the event of adjustment difficulties.

Vietnam combat troops were neither trained in nor deployed as intact units. In Vietnam, in contrast to the two world wars and Korea, unit integrity was scant (Figley, 1978). The Vietnam combat soldier served a highly individualized tour of duty based on a rotation plan know as DEROS (date of expected return from overseas) with an explicit time frame of 13 months for Marines and 12 months for all other services (Brown, 1984). Originally intended to reduce the incidence of combat-related stress reactions, this policy was later seen as a possible source of dysfunction owing to a lack of unit cohesion and weak identification with the war effort (King & King, 1991). This reduced unit cohesion and identification resulted in a "loner" or "survival of self above all others" mentality (Carroll, 1983).

In addition, Veterans who reached their rotation dates could be engaged in a search and destroy mission on Monday and walking the streets of their hometowns by Thursday. This lack of a transitional period of adjustment to become "rehumanized" further separated veterans from those around them (Carroll, 1983;
DeFazio, 1975; Schuetz, 1980). Distasteful as it may seem, violence can be a coping mechanism, although a disfunctional one that can simultaneously be a way to cope and a stimulus for even more stress (Boss, 1988).

(3) The nature of a guerrilla war is savage, brutal, as one veteran described it, "up close and personal." The thick jungle foliage reduced kill zones to a few feet. Friends died close, often in the arms of their buddies. Emotional survival was dependent upon the soldier's ability to repress his emotions (DeFazio, 1975). While these conditions are certainly not exclusive to the Vietnam Conflict -- The Pacific Theater of operations during World War II was conducted under identical combat conditions -- this "trained inability to feel" (Brende & Parson, 1985; Egendorf, 1978: Parson, 1984; Wilson, 1978) or "state of emotional anesthesia" (Shartan, 1978) is persistent. Once emotions have been "turned off," they become difficult for the veteran to "turn on again." After consistently anesthetizing their empathetic reactions and cutting themselves off from ordinary sensory experience under fire, many ex-combatants find it painful and difficult to have humane feelings for other people. Accordingly, they allow little emotion and little intimacy to develop in their relationships. Close relationships are charged with great potential for anxiety and hurt. In despair and hopelessness, they keep their deepest emotional energies in reserve (Shatan, 1978). This problem prevents the veteran from risking further emotional trauma through significant interpersonal
relationships and/or creates a drive to control the interpersonal "space" within the dyad to minimize the potential risk of further loss (Brown, 1984; Brende & Parson, 1985; Roberts, 1982).

(4) The entire purpose of the American involvement in Southeast Asia was never made clear to either the personnel who fought the war or to the American public. The Vietnam Conflict became highly unpopular. This considerable moral doubt was often displaced onto the soldier creating a classic case of blaming the victim by holding him personally responsible for the war rather than the government (Brown, 1984; Brende & Parson, 1985; Carroll, 1983; DeFazio, 1975; Polner, 1971; Ryan, 1971). Returning veterans were treated with intense scorn, disgust and hatred by a nation that refused to look at itself honestly. The veteran was rejected, without respect or pride, by his country and himself (Brende & Parson, 1985; Brown, 1984). They were called animals because they had killed women and children. They had fought in America's only defeat and it was not even a war. They were considered foolish to fight. These charges lowered the veteran's self-concept and increased the sense of guilt, anger, frustration and pain (Brende & Parson, 1985; King & King, 1991). Carroll (1983) interviewed hundreds of returning veterans and found that not a single vet was without doubt as to the morality of the war. This self-doubt in the correctness of his actions further intensified the veteran's inability to justify the suffering of the war. As Nietzsche (1956, 200) puts it, "What makes man rebel against suffering is not really suffering
itself, but the senselessness of suffering . . . Man . . . does not deny suffering per se; he wants it, he seeks it out, providing that it can be given meaning."

(5) Finally, the very nature of the American culture contributed to the severity of the veterans' maladjustment. Many health professionals, historians, and social commentators view what happened to the Vietnam veteran the first five years after the war as a "national tragedy" (Matsakis, 1988). The unwelcome and, in some cases, overtly hostile homecoming given returning veterans and the subsequent discounting of their readjustment difficulties helped to create and solidify stress. In other cultures, grief is a natural process for soldiers returning from war. However, in our society, and in our military system especially, to be "emotional" is considered a sign of weakness. Soldiers are expected to be tough. When they returned to a country that was seriously divided politically and culturally, they were denied their war experiences (Brown, 1984). They were ignored and forced by society to discount and deny their pain. As a result, most veterans were forced to internalize feelings of frustration, anger, isolation and fear (Matsakis, 1988).

In spite of the unique stress-producing characteristics of the Vietnam Conflict, early research was optimistic that adjustment problems among veterans would be short lived (Bourne, 1970a, 1970b; Borus, 1974; Carr, 1973; Enzie, Sawyer & Montgomery, 1973; Worthington, 1977, 1978). The early research reported
inconsistent findings concerning the effects of combat stress among Vietnam veterans leading Worthington (1977, 1978) to advance a "stress evaporation" model. Worthington argued that the problems experienced by veterans were seldom long-term and would simply "evaporate" with time. However, more recent work (Card, 1983, 1987; Center for Disease Control, 1988, 1989; Daniels, 1982; Egendorf, Kadushin, Laufer, Rothbart & Sloan, 1981; Figley, 1978; Kaylor, King & King, 1987; Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar & Weiss, 1988a, 1988b; Laufer, Yager, Frey-Wouters, Donnellan, Gallops & Steinbeck, 1981; Matsakis, 1988; Penk, Rabinowitz, Roberts, Patterson, Dolan & Atkins, 1981; Roberts, 1982; Ursano, 1981; Wilson, 1980) suggests that at least 20% of Vietnam veterans continue to experience long-term psychological and emotional effects attributed to war-related anxiety. These dysfunctional "effects" have been described, researched and diagnosed as Posttraumatic Stress Disorder (PTSD).

PTSD Research and Findings

Descriptions of persistent, adverse psychological reactions to combat-related trauma date back to the American Civil War (Foy & Card, 1987a; Foy, Carroll & Donahoe, 1987b). However, theorizing about their origin did not begin until this century. Early theoretical interpretations of the phenomena advanced explanations which focused on either internal character flaws or adverse physiological
reactions to the stresses of battle as the primary agents of resulting sociopsychological maladjustment. 1) Unresolved psychosexual development conflicts or "war neurosis" (Freud, Ferenczi, Abraham, Simmel & Jones, 1921), 2) actual organic damage to the central nervous system or "shell shock," and 3) adverse combat physiological reactions referred to as "battle fatigue" (Baker, 1980) are three predominant themes of historical research.

Prior to World War II, emotional "break-downs," which resulted from exposure to combat, were viewed as resulting from long-standing character defects (Figley, 1978). The terms "combat exhaustion" and "combat fatigue" were first used during World War II. It was the first clinical recognition of the particularly stressful nature of the combat situation (Goodwin, 1980). During the Korean Conflict, "combat fatigue" was treated as a transient condition and was managed with "on-site" treatment as far forward (close to the battlefield) as possible (Bourne, 1970a).

The First Diagnostic and Statistical Manual was developed during the Korean Conflict (1952) and included a category labeled "gross stress reaction," which was defined as "responses to extreme physical and emotional stress, including the combat situation." The DSM-II (1968) replaced this category with "Transient Situational Disorders," which mentions combat-related stress only briefly. It implied that the symptoms should be of brief duration, while persistent symptoms should be regarded as a neurotic or character disorder (Boulanger, 1981). It was not until the DSM-III (1980)
was published that the term "posttraumatic stress disorder" formally became part of the literature. This modification was largely due to the findings of various veteran task forces (Shatan, Haley & Smith, 1978) and studies of post-trauma cases from returning Vietnam veterans (Horowitz & Solomon, 1975; Horowitz, 1976). It divided PTSD into two classifications: 1) acute -- onset and duration less than six months; and 2) chronic -- onset and duration longer than six months.

Although rich in clinical observation and heuristic value, within the current body of research there is a clear bias toward etiological formulations which favor reactions to external traumatic exposure variables over both the "character flaw" or the "physiological" models (Foy & Card, 1987, Foy, Carroll & Donahoe, 1987). Current research overwhelmingly supports the conclusion that veterans are reacting to external trauma. This trauma engenders psychological "survival" mechanisms which produces negative socialization patterns for some veterans.

Similar to most types of psychopathology, the development of PTSD appears to be multidetermined and related to a complex array of factors. A wide variety of pre-military, military, and post-military variables have been researched to investigate their relative importance and predictive value to the development and/or exacerbation of the disorder.

The literature on the impact of demographic and premilitary variables is conflicting. In early studies (Egendorf, Kadushin,
Laufer, Rothbart & Sloan, 1981; Kadushin, Boulanger & Martin, 1981; Laufer, Yager, Frey-Wouters, Donnellan, Gallops & Steinbeck, 1981), a positive correlation was found between increased PTSD symptoms and the independent variables of race and lower socioeconomic status. Blacks, Hispanics and soldiers from "poorer" families seemed to exhibit a much higher incidence of post-military social and psychological maladjustment, while white veterans from stable families exhibited a positive correlation with decreased levels of post-military stress. Even the NVVRS (1988) continued to report slightly higher levels of current PTSD for minorities (38.2 percent for non-whites with high war zone stress factors as opposed to 34.0 percent for whites). These early findings may be an artifact of U.S. military policy. A disproportionate number of the poor and minorities were unable to "dodge" the draft through college deferments. As a result, those from disadvantaged backgrounds bore the brunt of the actual fighting of the war (Card, 1983). In addition, minorities and the poor were over represented in combat line units. Therefore, this population may have been exposed to more significant levels of combat.

More recent studies (Card, 1987; Carrol, 1985; Foy, Sipprelle, Rueger & Carroll, 1984; Foy, Carroll & Donahoe, 1987) demonstrate no significant correlations between PTSD and either race or socioeconomic status. It is generally concluded that demographic and premilitary factors have minimal impact on postmilitary adjustment (Carroll, 1985; Foy, Sipprelle, Rueger & Carroll, 1984,

While the research may seem contradictory in its findings, perhaps the NVVRS (1988, 40) provides insight. Taken together, these results are consistent with a model of PTSD that posits a role of individual vulnerability (potentially including biological, psychological, and sociodemographic predisposing factors) and a role for exposure to environmental factors (war zone stressors) in determining who among theater veterans develops PTSD. However, it is clear that exposure to war zone stress makes a substantial contribution to the development of PTSD in war veterans that is independent of a broad range of potential predisposing factors.

Several studies (Card, 1987; Horowitz, Weckler & Doren, 1982; Penk, Rabinowitz, Roberts, Patterson, Dolan & Atkins, 1981) report a positive correlation between substance abuse and increased severity of PTSD symptomatology. The studies support a general finding that combat veterans who are substance abusers during their post-military adjustment phase suffer significant increases in social and psychological maladjustment. These veterans abuse alcohol and other drugs in an attempt to "cope" with or "anesthetize" negative thoughts and feelings. In fact, alcohol abuse or dependence and generalized anxiety disorder were by far the most prevalent disorders, both currently and in the past, among men who served in the Vietnam theater. According to the National Vietnam Veterans' Readjustment Study (1988), almost half (49.1
percent) of Vietnam theater veterans met the criteria for at least one of these disorders at some point in their lives.

While the literature supports a general finding that there is a significant positive correlation between substance abuse and increased severity of PTSD symptomatology, it is unclear as to the difficulty in interpreting any cause/effect relationship. Does alcohol abuse, for example, cause increased symptomatic episodes or are the increased symptomatic episodes triggered by some other exterior stressor and veterans turn to alcohol in their attempt to cope? Matsakis (1988) has suggested that the abuse and symptomatology are most probably interdependent; that is to say, each contributes to the increased severity of the other.

A review of the literature demonstrates that exposure to combat, the level of intensity of that combat, and the level of participation in violent and brutal acts by the veteran are especially salient to the prediction of post-military adjustment problems (Blanchard, Kolb, Pallmeyer & Gerardi, 1982, 1986; Card, 1987; Carroll, Rueger, Foy & Donahoe, 1985; Egendorf, Kadushin, Laufer, Rothbart & Sloan, 1981; Foy, Sipprelle, Reuger & Carroll, 1984, Foy & Card, 1987; Foy, Carroll & Donahoe, 1987; Gallers, Foy & Donahoe, 1985; NVVRS, 1988; Laufer & Gallops, 1982; Malloy, Fairbank & Keane, 1983; Penk, Rabinowitz, Roberts, Patterson, Dolan & Atkins, 1981; Roberts, 1982). Those veterans with high levels of exposure to war zone stress produce much more dramatic findings. For both male and female theater veterans, high level exposure to
war zone stressors contribute to dramatically increased levels of posttraumatic stress disorder (NVVRS, 1988). For men, level of war zone stress exposure is positively correlated with number of divorces, marital or relationship problems, and parental problems. The relationship between higher divorce rates and PTSD is also evident for women. Both men and women with PTSD are less likely than those without the disorder to be married, have had more divorces, and experienced more marital/relationship problems (NVVRS, 1988).

The literature confirms the necessity of relationships for post-military social support is a powerful moderating influence on present veteran status (Egendorf, Kadushin, Laufer, Rothbart & Sloan, 1981; Kadushin, Boulanger, Martin, 1981; Keene, Fairbank, Caddell, Zimering & Bender, 1985; Laufer & Gallops, 1985; Matsakis, 1988). Positive correlations between decreased PTSD symptomatology and post-military support resources have been demonstrated among veterans with friends who are also Vietnam veterans (Kadushin, Boulanger & Martin, 1981; Laufer, Yager, Frey-Wouters, Donnellan, Gallops & Steinbeck, 1981). The NVVRS (1988) reports that veterans who served on active duty more than 20 years have especially low rates of PTSD, while those serving 4-19 years have only slightly elevated rates. Veterans who served only their initial "hitch" and then left the service seem to have the most trouble coping with their combat experience. This finding would suggest that continued contact with the military and other
veterans may decrease the severity of posttraumatic stress disorder.

The research also indicates that the effects of PTSD are mitigated for combat veterans with positive perceptions of family support systems and helpfulness (Foy, Sipprelle, Rueger & Carroll, 1984; Frye & Stockton, 1982). Card (1987) reported positive correlations between the absence of support systems and increased PTSD symptomatology among divorced, separated or single veterans. The NVVRS (1988) found significant increases in both the incidence and severity of PTSD symptomatology in both male and female veterans who were single, divorced, separated or living as married than for married veterans.

Interpersonal Relationships and PTSD

PTSD research has consistently identified Vietnam combat veterans as exhibiting long-term emotional and psychological adjustment problems, which negatively impact their ability to sustain successful, interpersonal relationships. Some of the research findings are that PTSD sufferers:

1978) by regulating the interpersonal distance within the dyad because they fear the potential loss (Brende & Parson, 1985).

(2) report dissatisfaction within interpersonal relationships and increased negative perceptions of significant problems (Parson, 1984; Penk, Rabinowitz, Roberts, Patterson, Dolan & Atkins, 1981; Wilson, 1978).

(3) experience more interpersonal conflict (Parson, 1984; Wilson, 1978, 1980). Over one in four scored high on active expression of hostility. 46.8 percent have committed at least one violent act during the past year -- almost ten percent having committed thirteen or more (NVVRS, 1988).


(6) As a result, PTSD sufferers experience less successful interpersonal relationship (Derogitis, 1976; Derogatis & Cleary, 1977; Laufer & Gallops, 1985a, 1985b; Lumry, 1970; Nace, 1977; Roberts, 1982; Wilson, 1978, 1980a, 1980b). Almost one-fourth are currently separated, 70 percent have been divorced, 35 percent two or more times, 49 percent report having high levels of marital or relationship problems, 55 percent have high levels of difficulties
with parenting, and 50 percent report poor levels of overall family functioning (NVVRS, 1988).

The Horowitz Interpersonal Problem Inventory (Horowitz, 1979, 1982; Horowitz & French, 1979) identified 87 of the most commonly reported interpersonal problems experienced by PTSD sufferers and classified them into five dimensions or themes: 1) intimacy; 2) aggression; 3) compliance; 4) independence; and 5) sociability. Horowitz, Weckler & Doren (1982) compared the responses of PTSD-positive and PTSD-free veterans and reported significant differences in all five dimensions. The dimensions of intimacy and sociability were particularly accurate in predicting variance. Significant differences were found in responses to "it's hard for me to trust other people," (+PTSD 2.88/-PTSD 1.84, p<.001); "it's hard for me to get close to other people," (+PTSD 2.4/-PTSD 1.57, p<.002); and "it's hard for me to open up with other people and talk freely," (+PTSD 2.03/-PTSD 1.50, p<.011).

The Relevancy of Communication Theory

Communication functions not only to transmit information, but to define the nature of the relationship binding the participants (Hawes, 1973). Central to any theory of interpersonal communication is the assumption that the experience of the individual is affected in a major way by the individual's communication with others (Dance & Larson, 1976). Any student
who seeks to understand human activity must touch on communication processes in one form or another (Littlejohn, 1983).

Every interpersonal exchange bears two messages, a "report" message and a "command" or "relational" message. The report message contains the substance or content of the communication, while the command message makes a statement about the relationship (Ruesch & Bateson, 1951). Relational messages are those verbal and nonverbal expressions that indicate how two or more people regard each other, regard their relationship, or regard themselves within the context of the relationship (Burgoon & Saine, 1978). "Every communication has a content and a relationship aspect such that the latter classifies the former and is therefore metacommunication (Watzlawick, Beavin & Jackson, 1967, 17)."

Within relational communication, this metacommunication function, referred to as the "relational" or "command" function, forms a basis for a negotiation process whereby persons reciprocally define their relationships and themselves (Bateson, 1958; Bochner & Lenk-Krueger, 1979; Clark & Delia, 1979; Eisenberg & Smith, 1971; Ruesch & Bateson, 1951; Watzlawick, Beavin & Jackson, 1967; Millar & Rogers, 1976; Burgoon & Hale, 1984, 1987). This negotiation process is critical to maintaining positive perceptions of self and of the relationship. Communication interaction is, therefore, a constant process of defining relationships (Littlejohn, 1983).

The literature concerning the critical role of competent relational communication in engendering positive relational
outcomes suggests several conclusions. Both participants must be involved in the communication. Positive correlations between interpersonal involvement and communication competency (Duran & Kelly, 1988), increased ego involvement and communication effectiveness (Donahue, Allen & Burrell, 1988), and degree of involvement and communication satisfaction (Onyekwere, 1991) have been reported.

These parameters further define the relationship. Communication competency and empathy (Redmond, 1985), satisfaction with the communication itself, and one's ability to communicate (Cupach, 1982; Zakahi & Duran, 1984) are highly interrelated. Obviously, relational participants who experience difficulty in expressing intimacy and engaging in honest open communication seriously imperil their ability to pursue and/or sustain successful interpersonal relationships.

Secondly, a basic sense of reciprocity is critical to increasing feelings of trust and intimacy. The "negotiation" process described within "relational" messages assumes that both participants share a commitment to a mutual exchange of information (Bateson, 1958; Bochner & Lenk-Krueger, 1979; Clark & Delia, 1979; Eisenberg & Smith, 1971; Ruesch & Bateson, 1951; Watzlawick, Beavin & Jackson, 1967; Millar & Rogers, 1976; Burgoon & Hale, 1984, 1987). Without "relational" messages, whose content engenders the mutual exchange of "intimate" information, one cannot reduce uncertainty about another (Berger & Calabrese, 1975; Berger & Bradac, 1982).
Increased uncertainty is positively correlated with relational disengagement and termination.

A series of studies (Davis & Todd, 1985; Planalp & Honeycutt, 1984, 1985; Planalp, Rutherford & Honeycutt, 1988) has examined the effects of uncertainty in ongoing relationships. While they focus on various issues — differing beliefs about the relationship, violations of friendship and trust, reduced closeness or intimacy — these studies demonstrate the significance of these events in personal trauma and relational damage. The events have overwhelmingly negative consequences expressed in terms of relational dissolution (Planalp & Honeycutt, 1988). Again, communication is critical to relational outcomes. The tendency to engage rather than avoid communication is positively correlated with more positive relational outcomes (Planalp & Honeycutt, 1985). Metts and Cupach (1990) confirm these general findings. Dysfunctional relational beliefs exhibit positive correlations with destructive problem solving responses of exit and neglect. Effective problem-solving responses mediate between dysfunctional beliefs and relational satisfaction.

The Topoi of Relational Communication

In 1984, communication researchers Judee K. Burgoon and Jerold L. Hale introduced their seminal work on the topoi of relational communication. They began their analysis with the
axiom that as communication episodes are enacted, the nature of the relationship between participants is defined. At the core of this definitional process are the relational messages exchanged between participants. These relational messages are those verbal and nonverbal expressions that indicate how two or more people regard each other, regard their relationship, or regard themselves within the context of the relationship (Burgoon & Hale, 1984; Burgoon & Saine, 1978). Therefore, by examining the process of communication between relational participants, researchers should gain valuable insight into how each participant defines the nature of the relationship they share. Again, Hawes (1973, 15) expresses this axiom as "communication functions not only to transmit information, but to define the nature of the relationship binding the symbol users."

Burgoon and Hale posited that though relational communication had traditionally been conceptualized as operating along two or three dimensions, an elaborated view of relational messages could be advanced through a synthesis of diverse bodies of literature. Twelve conceptually distinct dimensions were adduced: dominance-submission, intimacy, affection-hostility, intensity of involvement, inclusion-exclusion, trust, depth-superficiality, emotional arousal, composure, similarity, formality, and task-orientation. Of primary concern to this research, Burgoon & Hale, advanced the theoretical observations of Schutz (1966), Millar & Rogers (1976) and Altman and Taylor (1973).
William Schutz

William Schutz, in his fundamental interpersonal relations orientation (FIRO) theory (1958,1966), proposed three needs individuals seek to satisfy through interpersonal relationships. The first, inclusion, is the need to establish and maintain a satisfactory relationship with people with respect to interaction and association (Schutz, 1966, 18). Essentially inclusion concerns one's accessibility to others. A satisfactory self-concept emerging from optimal inclusion is the feeling that one is a worthwhile person (Littlejohn, 1983). Schutz describes the characteristics of inclusion to include interacting with people, identity, interest and commitment, being interested in others and eliciting interest from others.

The second need is control. A healthy relationship involves mutual respect for one's competence and ability (Littlejohn, 1983). Control is the need to establish a comfortable degree of influence that one exercises over the behavior of others and is exercised over oneself. As Schutz (1966, 24) puts it: "Thus the flavor of control is transmitted by behavior involving influence, leadership, power, coercion, authority, accomplishment, intellectual superiority, high achievement, and independence, as well as dependency (for decision making), rebellion, resistance, and submission." The self-concept growing out of the optimal fulfillment of this need is self-respect (Littlejohn, 1983).

The third need is affection, which involves perceptions that others desire close personal relations with oneself as well as efforts
to initiate more intimate relations with a psychologically comfortable number of people. Satisfactory feelings of affection include adequate levels of closeness with others. The resulting self-concept says, I am lovable. "Thus," as Schutz writes, "the flavor of affection is embodied in situations of love, emotional closeness, personal confidences, and intimacy. Negative affection is characterized by hate, hostility, and emotional rejection" (1958, 24).

The PTSD literature overwhelmingly reaches the conclusion that combat veterans with stress disorder experience significant difficulties satisfying all three need states. The necessary relationships within which these need states might be satisfied are avoided, controlled and/or unsuccessful (Brende & Parson, 1985; Carroll, 1983, 1985; Egendorf, Laufer & Sloan, 1981; Horowitz, 1979, 1980; Horowitz & French, 1979; Laufer & Gallops, 1985a, 1985b; Parson, 1984; Penk, 1981; Wilson, 1978).

Schutz provides specific insight as he describes four distinct levels or "states" an individual's behavior may reflect: 1) "Desired states" are those that optimally meet the individuals needs; 2) "Ideal states" are more than satisfactory -- they are the healthiest possible relations; 3) "Anxious states" involve too much or too little inclusion, control and/or affection; and, 4) "Pathological states" involve dysfunctional interpersonal relations and lead to various psychotic, psychopathic, or neurotic conditions (Littlejohn, 83).

Within each of these four "states" there are various subtypes or categories which seem to describe the PTSD sufferer. Within the
inclusion catagory, one subtype is the "undersocial." The undersocial has difficulty overcoming feelings of worthlessness and has a general anxiety that others will not want to associate with him. As a result, the undersocial becomes disinterested and fails to seek contact and/or relationships with others. Feelings of isolation, insecurity and rage (Brown, 1984; Carroll, 1983, 1985, DeFazio, 1975; King & King, 1991; Laufer, 1984; Shatan, 1978), the "loner" mentality (Carroll, 1983; King & King, 1991), and the lowering of the veteran's self-concept of worth which produced feelings of guilt and social unacceptability (Brende & Parson, 1985, King & King, 1991) have all contributed to Vietnam veterans' sense of what Schutz would describe as the "undersocial." The PTSD sufferer fails to seek out contact and relationships with others preferring to remain alone in his pain and guilt (Matsakis, 1988).

Within the control catagory, the "autocrat" tends to dominate others. General mistrust underlies his concept of self-identity. To surrender control to another would necessitate an extension of vulnerability. Trust is essential to a person willing to surrender or share control of the relationship with a partner. Trust and vulnerability are difficult for the PTSD veteran. The inability to distinguish friend from foe (Brown, 1984; DeFazio, 1975; Shatan, 1978), the moral outrage and confusion brought on by rejection from the society and even family members who previously supported the veteran prior to combat (Matsakis, 1988) and the loss of friends to violent deaths resulting in a "trained inability to
feel" (Brende & Parson, 1985; Egendorf, 1978; Parson, 1984; Wilson, 1978) all create a lack of trust, a strong inability to allow oneself to become vulnerable, and an intense drive to control the interpersonal space within the dyad to minimize potential risks (Brown, 1984; Brende & Parson, 1985; Roberts, 1982).

Finally, within the affection category, the "underpersonal" fears being unlovable. He relates superficially with others and insulates himself from relationships which might force a deeper sense of emotional commitment. Again, vulnerability and trust are critical factors in allowing oneself to become emotionally committed to another. Emotional survival in Vietnam was dependent upon the soldier's ability to repress his emotions (DeFazio, 1975). This "state of emotional anesthesia" (Shatan, 1978) remains persistent because once emotions have been turned off, they become difficult to turn back on again. Veterans avoid the risks of further emotional trauma by remaining "underpersonal." Brown (1984), Brende and Parson (1985), Matsakis (1988) and Roberts (1982) have all describe persistent feelings of guilt, worthlessness, and fear which result in the PTSD sufferer convincing himself that he is unlovable. As a result, they "insulate" themselves from meaningful interpersonal relationships (Brende & Parson, 1985; Horowitz, 1979; Horowitz, Weckler & Dorn, 1982; King & King, 1991; Matsakis, 1988, Parson, 1984, Roberts, 1982).

Schutz posited that the task of any person in meeting these three needs of inclusion, control, and affection is to strike an optimal
psychological balance or equilibrium. Failure to successfully meet this "balance" will lead to 1) psychosis, particularly schizophrenia; 2) psychopathic or obsessive-compulsive behavior; and/or 3) a pathological form of neurosis (Littlejohn, 1983).

Frank Millar and Edna Rogers

Millar and Rogers offer a tentative and nonexhaustive set of interrelated but conceptually distinct themes found in the literature on social relationships. They begin with the assumption that relationships are complex. They use a symbolic interactionist and systems base in assuming that "since a person's reality is largely a function of his or her own making, choice and change are two critical themes that must be emphasized in any communication theory of human behavior (Millar & Rogers, 1976, 88)." Communication is a reciprocal negotiating process which helps to define the nature and content of the relationship. The three themes, or dimensions, they discuss are control, trust, and intimacy.

Control entails who has the right to direct, delimit and define the actions within the interpersonal system (Burgoon & Hale, 1984). It is a pivotal dimension within relationships. Control is characterized by two variables: 1) rigid-flexible -- which addresses the amount of control which flows back and forth between the relational partners; and 2) stability-instability -- which examines...
the predictability of this flow, or shift. The more consistent the pattern of control over time, the more stable the control. Research clearly indicates that veterans with PTSD are driven by a need to control the interpersonal distance within the dyad (Brende & Parson, 1985). The issues of dominance and control are recurrent themes within the PTSD literature (Brende & Parson, 1985; Brown, 1984; Carrol, 1983; King & King, 1991; Roberts, 1982).

Trust includes both trusting behaviors -- indications of one's vulnerability and dependence -- and trustworthy actions--indications that one will not exploit another's vulnerability and will not betray the trust that one has been given (Burgoon & Hale, 1984, 204-205). Trust is correlated with three variables: 1) Vulnerability -- which involves placing oneself in a situation wherein one may get hurt by the choices of the other (Littlejohn, 1983). Millar & Rogers (1976) argued that the less a person was willing to place themselves into a position of risk or vulnerability the higher the degree of suspicion and distrust. 2) Reward dependency -- which is concerned with the degree to which one depends upon their relational partner within the relationship. High vulnerability by one member of the dyad, relative to the other, may create exploitation by the member who is less vulnerable within the relationship (Millar & Rogers, 1976). and, 3) Confidence pattern -- the relative degree of confidence in the other person's trustworthiness. In a unilateral relationship one participant is significantly more confident than their partner. In a cooperative
relationship confidence and trust are mutual demonstrated by both participants (Littlejohn, 1983).

Once again, trust, and the ability to allow oneself to become vulnerable to others, is a critical factor in fostering the type of emotional climate necessary for the positive growth of a relationship. In Vietnam, veterans established relationships with fellow soldiers only to watch them become crippled or killed. This constant sense of loss, coupled with low unit moral and integrity, contributed to a desire to avoid involvement with others and the creation of a "loner" mentality (Brown, 1984; Carroll, 1983; King & King, 1991). Emotional survival was dependent upon the soldier's ability to repress emotions (DeFazio, 1975). This "state of emotional anesthesia" (Shatan, 1978) is persistent for once emotions have been turned off, it becomes difficult to turn them back on again. Veterans avoid feelings and emotional attachments that would make them vulnerable to others. As a result, they "insulate" themselves from meaningful interpersonal relationships (Brende & Parson, 1985; Horowitz, 1979; Horowitz, Weckler & Dorn, 1982; King & King, 1991; Matsakis, 1988; Parson, 1984; Roberts, 1982).

The final dimension discussed by Millar and Rogers is intimacy. Intimacy concerns affective responses, the development of attachments, and the degree of self-confirmation that is available in the relationship (Burgoon & Hale, 1984). Two variables are relevant. The transferable-nontransferable continuum refers to the degree to which the relationship is unique. Within a
nontransfereable relationship each participant gives and receives self-confirmation almost exclusively from one another. This type of relationship would produce a high degree of intimacy; and consequently, depends upon a high degree of trust to develop (Millar & Rogers, 1976). In a transferable relationship the participants most often seek self-confirmation with persons outside of the relationship. The second variable is expressed as the degree of attachment. This refers to the amount of interdependence in terms of mutual self-confirmation achieved by the relational pair (Littlejohn, 1983).

Issues of intimacy are quite complex and predominate the PTSD literature. In her book, Vietnam Wives, Dr. Aphrodite Matsakis (1988) reports that the majority of veterans surveyed described a persistent desire to satisfy a general need for intimacy, but were either 1) too fearful of the perceived risks associated with close interpersonal relationships, 2) had attempted and most often repeatedly failed in those attempts, or 3) were currently engaged within relationships from which they reported a low state of satisfaction. These general findings are consistent with studies which reported fear of involvement and potential loss (Brende & Parson, 1985), greater relational failure rates for PTSD-positive veterans (Carroll, 1983, 1985; Derogitis, Rickles & Rock, 1976; Derogitis & Cleary, 1977; Laufer & Gallops, 1985; Lumry, Cedarleaf, Wright & Braatz, 1970; Nace, Meyers, O'Brien, Ream & Mintz, 1977; Penk, Rabinowitz, Roberts, Patterson, Dolan & Atkins, 1981; Roberts,

Altman and Taylor

Altman and Taylor (1973) proposed a model of relationship development that they term social penetration, the process by which people come to know each other (Reardon, 1987). Altman and Taylor's work emphasizes the need for self-disclosure among potential relational participants in order to "feed" the status of mutual trust as the cornerstone in the development of close interpersonal attachments (Burgoon & Hale, 1984). This self-disclosure is an orderly process by which people let others come to know them gradually. As mutually "important" and self-defining information is collectively exchanged, participants move toward deeper levels of their personalities; and subsequently, greater feelings of trust, intimacy and involvement. One critical factor to the natural progression of this mutual exchange is reciprocity. Reciprocity involves the mutual exchange of intimate information on a more-or-less equal basis.

The concept of reciprocity is closely associated with the work of Sidney Jourard (1968). His theories on self-disclosure advocate a
need for transparency. Jourard defines transparency as a two-sided coin. It involves the willingness of the individual to disclose himself to others and to allow others to disclose themselves to him. Without a willingness to "exchange" opportunities for self-disclosure, relationships either cannot be pursued or cannot develop to their fullest potential (Jourard, 1971).

Both concepts, reciprocity and transparency, demand a tremendous amount of trust from potential relational participants. The negotiation process, by which individuals define their roles within the relationship and the relationship itself, assumes that both participants share a commitment to a mutual exchange of information (Bateson, 1958; Bochner & Lenk-Krueger, 1979; Clark & Delia, 1979; Eisenberg & Smith, 1971; Ruesch & Bateson, 1951; Watzlawick, Beavin & Jackson, 1967; Millar & Rogers, 1976; Burgoon & Hale, 1984, 1987). Jourard (1971) refers to this trust as having the courage to share oneself with others. Millar & Rogers (1976) would associate these concepts with vulnerability. Schutz (1966) might argue that inclusion is an issue of accessibility. In any case, without "relational" messages, whose content engenders the mutual exchange of intimate information, neither participant can reduce feelings of uncertainty about the other or the potential of the relationship (Berger & Calabrese, 1975; Berger & Bradac, 1982).

PTSD-positive veterans experience difficulty in expressing messages which engender feelings of mutual trust and vulnerability

In summary, the literature is clear on four salient points: 1) competent communication is critical to maintaining positive perceptions of self and in engendering positive relational trajectories for dyadic relationships; 2) relational participants who experience difficulty in expressing intimacy and engaging in honest, open communication seriously imperil their ability to pursue and/or sustain successful interpersonal relationships; 3) PTSD-positive veterans experience great difficulty in every area identified as critical to engendering positive, relationship-building communication; and, as a result, 4) PTSD-positive veterans either avoid close interpersonal relationships or experience a significantly greater failure rate than their peers. Though the link between posttraumatic stress syndrome and those need states or drives essential to engendering competent relational communication (trust,
intimacy, affection, control) would seem to be well established within the literature, research conducted specifically to establish the link between PTSD and communication behavior is lacking. How does the severity of posttraumatic stress syndrome effect competent relational communication?

Fundamental Themes of Relational Communication

In 1987, Judee Burgoon and Jerold Hale conducted a series of three empirical studies to validate their previously advanced schema or topoi of relational communication. In the original study (1984), Burgoon and Hale proposed 12 conceptually distinct but interrelated message themes that are central to defining interpersonal relationships. They advanced 12 continua along which they posited participants exchange relational information and mutually define their relationship: (1) dominance-submission, (2) emotional arousal, (3) composure-noncomposure, (4) similarity-dissimilarity, (5) formality-informality, (6) task v. social orientation, (7) intimacy, and the subcomponents of intimacy, (8) depth (or familiarity), (9) affection (attraction and liking), (10) exclusion-inclusion, (11) trust, and (12) intensity of involvement.

The more recent research used exploratory oblique and orthogonal factor analyses and confirmatory factor analysis. Seven of the original twelve themes were empirically validated through a series of studies. A reliable and valid measurement instrument for
self-report and observational use in interactional studies of relational communication was created. The final recommended measurement instrument is a 30-item scale incorporating eight independent themes or clusters of themes: (1) immediacy/affection (intimacy I), (2) similarity/depth (intimacy II), (3) receptivity/trust (intimacy III), (4) composure, (5) formality, (6) dominance, (7) equality, and (8) task orientation.

The measurement instrument demonstrated strong predictive validity and good reliability (the measure yielded coefficient alpha reliabilities of .83 for intimacy I and .86 for intimacies II & III; dominance was reported at .76). The scale has strong utility and could be used productively in a wide range of interpersonal contexts. Researchers could use the scale to assess the import of relational transactions between husband and wife. They could be used to verify the extent to which actors and observers make the same attributions about communications events. "It should be evident that relational communication scales hold great promise for uncovering symbolic relational meanings that are embedded in all communication messages" (Burgon & Hale, 1987, 40).

1.3 Expectations Based upon Review of Literature

Burgoon and Hale's studies (1987) focused primarily on data provided by undergraduate students enrolled in communication classes. Some of the communication exchanges that the students
were asked to recall were not derived from close or committed interpersonal relationships. Students were paired with research partners at random within their classes or given the freedom to select exchanges from a number of different types of relationships that they engaged in outside of class. There is nothing within the research to suggest that the students selected relationships which were intimate or in crisis during the collection of data.

The nature of Burgoon & Hale's research generates three concerns for the present study: 1) the present research requires participants to be engaged in significant on-going relationships. Subjects will be required to recall communication exchanges with relational partners. Those exchanges will often be highly intimate and personal in nature; 2) the nature of PTSD-positive veterans and their history of relational dysfunction supports the expectation that many of the dyads studied will represent relationships in crisis; and, 3) since PTSD-positive veterans experience significant difficulties functioning within the relational themes of disclosure and trust, just providing this type of information may represent a degree of risk for the participants.

Any subsequent analysis of data from these exchanges is predicated upon the assumption that the research participants have a certain amount of investment in their relationships; and thus, there is, by definition, a significant degree of involvement, participation, and risk. These variations in the types of relationships of the research participants and the relational
exchanges they are asked to recall represent a fundamental difference in the scope of this research and Burgoon and Hale's previous studies. These fundamental differences in the nature of the relationships studied may produce divergence in outcomes with regard to the Relational Communication Scale. Therefore, the first step in producing data useful in providing insight into the interrelatedness of PTSD and communication behavior is to validate Burgoon and Hale's recommended measurement tool -- the Relational Communication Scale -- for this specific study population. The first step is to conduct a confirmatory factor analysis. If the confirmatory factor analysis affirms the Relational Communication Scale for use with PTSD-positive subjects and their relational partners, then subsequent data analysis will be conducted using those factors. If the confirmatory analysis fails to affirm, then a new factor analysis using principle components of oblique rotation will be performed and the resulting factors employed in subsequent statistical analysis.

The literature reports that PTSD-positive veterans experience significant difficulties within the relational domains of dominance/control and intimacy. However, the literature is often silent with regard to how veterans' relational partners function within these dimensions. Since reciprocity, a mutual exchange of intimate knowledge and information through positive communication behaviors, is necessary to the development of a healthy relationship and PTSD-positive veterans may be unable to
meets this need, it would seem logical to expect that their potential partners might also experience difficulties functioning within the dimensions of intimacy and dominance/control. However, each participant's perspective on the relationship might be radically different though they share similar dysfunctional behavior. The veteran may not perceive his controlling behavior as negative, but only as the natural state of the relationship. He may not view his "quiet," often "closed" behavior as a lack of intimacy. However, his relational partner may have significant problems coping with what she may define as his obsessive controlling behavior and complete lack of intimacy. The proposed measurement tool asks each participant the same series of questions, but each participant will perceive the relational communication behavior within the dyad from a unique perspective. Accordingly, research question one is proposed as follows:

RQ1: Are there significant differences in the responses of PTSD-positive veterans and their relational partners on the Modified Relational Communication Scale?

Burgoon and Hale (1987) have suggested that a highly intimate interaction may cause all of the intimacy factors to collapse into a single, global measure of intimacy. Given the inherent differences of the study populations discussed above, it would seem logical to assume that significant on-going relationships would provide the
higher degree of intimacy necessary to cause a merging of dimensions into a more global measure of intimacy. However, since PTSD positive veterans experience such significant difficulty in expressing intimacy within their relationships, what impact will this have on the intimacy factors? Therefore, research question two is advanced as follows:

\[ RQ_2: \text{Will the three dimensions within the relational theme of Intimacy collapse into a single, global measure?} \]

The Burgoon & Hale Relational Communication Scale often asks the research participants to recall and report on a single significant conversation. It should be of concern, therefore, that subject selection bias may impact the validity of any general relational conclusions based upon data provided by a single, self-selected, self-reported, incident. If the subjects in question participated in a serious argument the night before the data was collected, a negative view of the overall relationship might seem a valid conclusion based upon the data reported. However, if the dyad is in a "honeymoon" phase and the participants engaged in an intimate "state-of-the-relationship" talk the night before the data was collected, a positive view of the overall relationship might seem a valid conclusion based upon the data reported. In either case, this "snap-shot" of the relationship might not provide an accurate
analysis of how the participants view the relationship overall. Therefore, it is possible that any conclusions based upon the data reported would be valid only for that particular conversation and may not support a more general conclusion on the state of the relationship as a whole.

To address these concerns ten questions, which are designed to derive a more global measure of the state of the relationship with regard to participant satisfaction within the relational themes of intimacy, dominance/control, and overall dyadic communication behavior have been added to the survey instrument. Research subjects will also be asked to respond to a simple relational happiness scale. Once a factor analysis of this "global" scale has been conducted, it should provided more insight into the overall relational perceptions experienced by the research participants. This "global measure" of the state of the relationship should be validated against the Burgoon & Hale scale using Pearson r correlations to confirm consistency between the measures. If both measures derive similar outcomes, the potential weaknesses discussed above should be adequately addressed. In addition, collecting data on the perceptions of the participants in both a single, "typical" example of relational communication and in a broader, "global" view should provide a more valid insight into the dyad. Therefore, research question three is proposed:
RQ3: Is there a positive correlation between the factors of the Relational Communication Scale and the "global" measure advanced within this research?

Two themes, intimacy and dominance/control, are particularly salient to this research. The literature is conclusive with regard to the probable interrelatedness of these two themes in relational communication and positive PTSD symptomatology. PTSD-positive veterans experience persistent, long-term dysfunctional behaviors which are destructive to their ability to pursue, achieve and maintain close interpersonal relationships.

Burgoon and Hale divide the intimacy topoi into a cluster of three interrelated themes: (1) immediacy/affection, (2) similarity/depth, and (3) receptivity/trust. Again, the authors noted that a highly intimate interaction might cause all of the intimacy factors or themes to collapse into a single, global measure of intimacy within the relational content of the messages exchanged. This would seem to validate the interdependence of these themes with regard to relationship building. Schutz (1966), Altman and Taylor (1973), and Millar and Rogers (1976) all posit thematic relational drives based upon inclusion and affection (Schutz), trust and intimacy (Millar & Rogers) and mutual trust and disclosure (Altman & Taylor). Vulnerability and a willingness to exchange "intimate" information are critical to successful relational trajectories (Berger & Calabrese, 1975; Berger & Bradac, 1982).
As previously discussed, the literature indicates that veterans with positive PTSD symptomatology experience difficulty in getting close to others, in expressing messages of intimacy and trust, and allowing themselves to become vulnerable through close interpersonal relationships. PTSD-positive veterans often insulate themselves from relationships which have the potential for becoming close or intimate. The research is clear when it concludes that PTSD-positive veterans continue to experience difficulty in expressing intimate behavior. What is not clear is to what degree the social maladjustment (PTSD) impacts the subjects' ability to engender intimate messages with others. Does the degree of "impairment" reflect a positive relationship with the degree of difficulty in expressing relationally intimate messages? Burgoon and Hale's measurement instrument could be used to investigate the relationship between increased PTSD symptomatology and the resulting impact on positive, "intimate" relational communication. Accordingly, hypothesis one is proposed as follows:

\[ H_1: \text{Increased PTSD symptomatology will demonstrate an inverse correlation with the intimacy topoi of relational communication.} \]

Throughout their series of studies, Burgoon & Hale (1987) report that the dimension of dominance/control consistently emerged as an independent theme of relational communication.
Control coexists with the relational drives discussed above (intimacy -- affection, inclusion, trust, vulnerability). The need to establish a comfortable degree of influence that one exercises over the behavior of relational partners and that they, in turn, exercise over oneself is a powerful drive. The right to direct, delimit and define the actions of self and others within the interpersonal system is a critical function. Schutz, Millar & Rogers and Altman & Taylor all advance control as a central theme of relationship building and maintenance.

As previously discussed, the literature reports that PTSD positive veterans seek to control or dominate the interpersonal distance within relationships. One way of reducing the potential risks of a relationship is to "control" that relationship. It is clear that PTSD-positive veterans continue to experience the negative long-term effects of nonreciprocal dominance within their relationships. Increased aggression, conflict and relational failure resulting from the breakdown of trust and intimacy between participants is widely reported. What is unclear is the effect that PTSD has on the degree to which the subjects seek to control the interpersonal dyad through messages of control or dominance. Does the degree of "impairment" reflect a positive relationship with the drive to control or dominate potential or existing relationships through specific communication strategies or behaviors? Again, Burgoon and Hale's measurement instrument could be used to investigate the relationship between increased PTSD
symptomatology and the resulting impact to relational communication. Accordingly, hypothesis two is proposed as follows:

\[ H_2: \] Increased PTSD symptomatology will demonstrate a positive correlation with the dominance/control topoi of relational communication.

If a correlational relationship exists between increased PTSD and increased negative communication behaviors as demonstrated through hypotheses one and two, how might this relationship impact the focus of the relational communication itself? In addition to the questions contained within the Burgoon & Hale survey, research participants will be asked to describe the topic, type and resulting feelings of the communication exchange upon which they are reporting. These responses will be coded as either positive or negative. As PTSD increases, will the subjects increasingly focus on negative exchanges? Will increased PTSD reflect a measurable positive correlation with the use of increased negative exchanges? Research question four is proposed as follows:

\[ RQ_4: \] Will increased PTSD symptomatology reflect a positive correlation with negative exchanges that produce negative feelings?

All research subjects will be asked to respond to a simple relational happiness scale. The literature consistently reports that
PTSD positive veterans experience less successful interpersonal relationships (Brende & Parson, 1985; Brown, 1984; Carroll, 1983, 1984; NVVRS, 1988; Parson, 1984). Dissatisfaction with personal relationships, unhappiness, and perceptions of significant problems are commonly reported by troubled veterans (Matsakis, 1988; NVVRS, 1988; Parson, 1984; Penk, Rabinowitz, Roberts, Patterson, Dolan & Atkins, 1981; Wilson, 1978). As a result, almost one-fourth of PTSD-positive vets are currently separated, 70 percent have been divorced (35 percent two or more times) 49 percent have high levels of marital or relational problems, and 50 percent report poor levels of overall family functioning (NVVRS, 1988). The conclusion within the research literature indicates that PTSD is associated, even correlated, with decreased relational satisfaction. The question is what role negative communication might play in this correlated relationship. If a correlation exists between increased PTSD symptomatology and decreased marital happiness, is it possible to measure the association between increased PTSD symptomatology, decreased marital happiness and increased negative communication behaviors? Research question five is proposed as follows:

RQ5: If an inverse correlated relationship between PTSD and relational happiness exists, will there also be increased negative communication and dissatisfaction with the relational communication?
1.4 Summary

The literature has documented the powerful moderating influence that post-military social support through the intimate relationships provided by friends, family members, and relational partners provides on present veteran status (Egendorf, Kadushin, Laufer, Rothbart & Sloane, 1981; Figley, 1978; Kadushin, Boulanger & Martin, 1981; Keane, Fairbank, Caddell, Zimmering & Bender, 1985). Keane & Fairbank (1984) stress the critical importance of long-term marital and family support in helping the veteran to adjust and cope with the persistent psychological and emotional "fallout" of war-related anxiety. Sadly, the literature also reports that PTSD-positive veterans experience tremendous difficulty in sustaining the very "intimate" relationships which offer them at least some hope of normality.

The literature is also clear in its overwhelming conclusion that successful interpersonal relationships can neither be pursued nor maintained without positive, effective relational communication. Central to any theory of interpersonal communication is that the experience of the individual is affected by the individual's communication with others (Dance & Larson, 1976). The link between posttraumatic stress disorder and failed relationships has been strongly reported through over three decades of research. The relationship between PTSD, failed relationships and the veterans' inability to function within the relational dimensions of
trust, intimacy, and control is also well documented. However, the relationship between an inability to function normally within these relational dimensions and a subsequent inability to engender positive, effective relational communication has yet to be explored.

The intent of this research is to collect data from a purposeful sample of PTSD-positive veterans and their relational partners currently engaged in significant on-going interpersonal relationships. The data provided by these dedicated pairs will be examined for validation of the two research hypotheses and investigation of the five research questions proposed. A positive correlation between the severity of the sociopsychological maladjustment (PTSD) and the degree to which the relational communication is negatively impacted will be advanced. Simply put, the greater the veterans' difficulty with posttraumatic stress the greater their difficulty in engendering positive relational communication.
2.1 Subjects

The execution of this research required a large sample (N>150 couples) of veterans and their relational partners currently suffering from the effects of posttraumatic stress disorder. Due to the specific focus of the research, participants were required to satisfy four criteria for inclusion in the sample population: First, they had to meet the specific characteristics of the targeted phenomenon -- that is, each participant was required to be a Vietnam combat veteran who served in country (in the Vietnam Theater of operations). The parameters for the variable "combat" were loosely structured to include any veteran who through the normal execution of his or her assigned duties might be exposed to "war-related" stressors. This would include representatives from the military veteran and civil service populations often overlooked or excluded in other "combat-focused" research.

Borus (1974) posited that the meaning of combat should be based upon the perceptions of the individual. Indeed, numerous authors and researchers have suggested that just being in country presented significant risks due to the nature of the conflict (Brown, 1984; Card, 1983, 1987; Carroll, 1983; Carroll, Rueger, Foy & Donahoe, 1985; Matsakis, 1988). Once in country, it was impossible
to avoid the war. As a result, there were no "safe" assignments. Air Force ground crews, Coast Guard Riverine Patrol personnel, logistical support and operations workers, Diplomatic Corps and U.S. Governmental advisors and workers, medical unit personnel, and noncombatant roles, such as, truck drivers, mechanics, clerks and chaplains are often lumped into the category of noncombatants; and as a result, are often excluded from "combatant-focused" research.

A review of the PTSD literature demonstrates that exposure to combat, the level of intensity of that combat, and the level of participation in violent or brutal acts by the veteran are especially salient to the prediction of post-military adjustment difficulties (Blanchard, 1982; Card, 1987; Carrol, 1985; Egendorf, 1981; Foy, 1984; Gallers, 1985; Lauger & Gallops, 1982; Malloy, 1983; Penk, 1981; Roberts, 1982). If these variables were used to "define" PTSD, it would explain the "noncombatant bias" found within the research. However, more recent studies would seem to indicate that while these variables are especially salient for those veterans assigned to primary combat missions (armor, infantry and artillery), another set of variables (such as seeing the death and suffering of the wounded for medical personnel) might prove more salient for "noncombatant" veterans (NVVRS, 1988; Matsakis, 1988). Both researchers have estimated PTSD levels as high as 40% among traditionally defined "noncombatant" veterans.

Under the most cursory of examinations these veterans may not have participated in "combat" at the same level or intensity as
the First Marine Division or the U.S. Army Special Forces; however, the evidence of their sacrifice and its impact are quite clear. This observation is not intended to minimize the suffering of primary combat troops, but simply to avoid an invalid distinction: combat vs. noncombat veteran. As one nurse explained it to this researcher, "It doesn't really matter whether you're the one doing the killing or the one trying to put them back together, stress is stress." Confirmatory studies by Matsakis (1988) and the NVVRS Report (1988) with regard to traditionally defined "noncombatant" war-related anxiety and the onset of PTSD have caused the Veterans Administration to revise its earlier assessments to include "noncombatants" in its "at risk" veteran population. Therefore, all in country Vietnam veterans were included as satisfying criterion number one.

An analysis of the data would seem to offer justification for this inclusion process. Fifty-three percent of the sample population who had described themselves as being assigned to noncombatant roles scored higher than 117 on the Mississippi Scale for Combat-Related PTSD. As a result, slightly more than half of the PTSD positive veterans (>117) studied within this research were assigned to traditionally defined "noncombatant" roles.

Criterion number two was necessitated by the relational communication focus of this research. In order to study the effects that PTSD had on the veterans' dyadic communication, it was essential that each veteran included in the target population was
currently engaged in a "significant" interpersonal relationship. This requirement presented a unique challenge specific to this population. PTSD positive veterans experience significant difficulties engendering and maintaining successful interpersonal relationships. (Brown, 1984; Carroll, 1983, 1985; Derogitis, 1976; Laufer & Gallops, 1985a, 1985b; Lumry, 1970; Matsakis, 1988; Nace, 1977; NVVRS, 1988; Wilson, 1978, 1980a, 1980b). As a result, they experience higher divorce rates (Laufer & Gallops, 1985; Matsakis, 1988; NVVRS, 1988; Roberts, 1982). It was expected that it would be difficult to find a sufficient number of PTSD-positive veterans currently engaged in significant relationships to derive statistically significant and valid conclusions. Therefore, the parameters for criterion number two were broadened to included "nontraditional" relationships. For the purposes of this study, a "significant" relationship was defined as either married or cohabitating for a period of not less than one year. In the final analysis, this concern proved groundless as 73.27% of the participants were currently married (married = 160; cohabitating = 58). However, it should be noted that this was not the first marriage for many of the subjects.

The third criterion required for inclusion in the research population was that both the veteran and his or her relational partner must be willing to cooperate by contributing data on themselves and their relationship to the research. This criterion was necessitated by two factors:
1) The relational focus of the research. Relational messages are those verbal and nonverbal expressions that indicate how two people regard each other, regard their relationship, or regard themselves within the context of the relationship (Burgoon & Saine, 1978). Within relational communication, this metacommunication function forms a basis for the negotiation process whereby persons reciprocally define their relationships and themselves (Bateson, 1958; Bochner & Lenk-Krueger, 1979; Clark & Delia, 1979; Eisenberg & Smith, 1971; Ruesch & Bateson, 1951; Watzlawick, Beavin & Jackson, 1967; Millar & Rogers, 1976; Burgoon & Hale, 1984, 1987). This negotiation process between participants is critical to the maintenance of positive perceptions of self and of the relationship. The reciprocal nature of this negotiation process requires the efforts of both relational partners. Self-perceptions of communication are most often one-sided. Both participants' views are necessary to understand the nature of what Bateson (1958) would refer to as the "relational" or "metacommunication" function within the dyadic communication. All survey packets returned without the participation of both the veteran and spouse were excluded from the sample. Nineteen incomplete packets were returned and excluded.

2) The nature of the target population. PTSD-positive veterans are often described as "hypervigilant," "super-paranoid," and "loners" (Brown, 1984; Carroll, 1983; DeFazio, 1975; King & King, 1991; Laufer, 1984; Shatan, 1978). Increased levels of anger and
frustration often result in higher levels of conflict and relational violence (Matsakis, 1988; Parson, 1984; Wilson, 1978). Extreme care was taken to insure that all participants were strictly volunteers and felt secure in both the anonymous nature of the data collection for both participants and their ability to withdraw at any time. All potential participants were briefed and strongly cautioned prior to data collection that if at any time they felt the process was stressful to their relationships or threatening to them or their relational partners they should discontinue the survey process and exclude themselves from the study.

Finally, the fourth criterion involved an absence of substance abuse. Several studies (Card, 1987; Horowitz, 1982; Penk, 1981, 1982) have reported a positive correlation between substance abuse and increased severity of PTSD symptomatology. The studies support a general finding that combat veterans who are substance abusers during their post-military adjustment suffer significant increases in social and psychological maladjustment. However, sorting out the cause-effect relationship between PTSD and substance abuse is problematic at best. The NVVRS (1988) has posited that the relationship may best be described as a mutually dependent cycle.

At first glance, the design of this research would seem to factor out substance abuse. The basic hypothesis suggests that as PTSD increases the veteran will experience a positively correlated increase in his or her difficulty in engendering positive relational
communication behaviors. If an increase in the severity of the veteran's PTSD is caused by an external variable, such as alcohol or drug dependence, how would it impact the validity of the conclusions, so long as the relationship between the increased levels of PTSD and communication incompetency remains positively correlated? However, what if the communication incompetency is contributed to by the substance abuse and/or dependence? The inclusion of substance abusers would make valid conclusions suspect. Therefore, potential subjects or their relational partners with substance abuse problems within the past year were asked to exclude themselves from the study.

The anonymity of the collection process makes complete verification of the exclusion of substance abusers impossible. However, the nature of the study population would seem to indicate a basic honesty. Eleven survey packets were returned with notes indicating the presence of a substance abuse problem and several veterans in support meetings, who were otherwise willing to participate, voluntarily excluded themselves when advised of this substance abuse criterion. Further mitigating the impact of this substance abuse problem is the research of McFall (1990). In his findings McFall reported that the Mississippi Scale for Combat-Related PTSD, which was used to identify PTSD-positive veterans in this research, was 88.2% accurate in discriminating between PTSD and substance-abusing control subjects.
Research indicates that demographic factors such as race, sex and socioeconomic status have little impact on PTSD (Carroll, 1985; Foy, 1987; Foy & Card, 1987; Penk, 1981; Roberts, 1982). Therefore no participants were excluded based upon race, sex or socioeconomic status. However, representativeness of variables was desirable. Verification of general demographic data to include race, sex, type of relationship (married or cohabitating) and length of relationship was collected. In addition, veterans were asked to supply their branch of service and a brief description of their duties and experiences in Vietnam.

2.2 Contacting Subjects

The original design of this research called for the collection of data from self-help seeking veteran populations currently under treatment within Veterans Administration Hospitals, Specialized PTSD Clinics and Vet Counseling Centers in VA Regions 3A and 3B. It is VA policy that any research conducted within VA facilities must be "underwritten" by a VA medical representative and receive formal approval prior to data collection. Dr. Madeline Uddo-Crain of the New Orleans VA Hospital's Department of Psychological Services served as the point of contact and the VA's representative during the approval process. After the formal research proposal and abstract were registered with and approved by Louisiana State University's
Committee on Human Subjects Research they were submitted to the Tulane University Medical Center's Committee on Uses of Human Subjects and the Department of Veterans Affairs' New Orleans Research & Development Committee. Due to the anonymity of the data collection and the innocuous nature of the information to be collected, both committees issued letters of exemption from formal review in accordance with Federal Regulations 45 CFR 46.101 (b)(3) "research involving unidentified survey procedures." However, after approval was received, the Department Head of Psychological Services refused to allow any representative within her department to cooperate with the study. The formal approval process had taken over a year only to be frustrated at the departmental level. Cooperation might have been sought and forced by seeking assistance from the Regional Research Director, but due to the time involved in winning approval an alternative method of collecting subjects was chosen.

Research participants were gathered from three sources: 1) through private psychological practices in the Baton Rouge area. Dr. Owen Scott, a psychologist specializing in combat stress and PTSD, and Dr. Cathy Castille provided assistance through access to their patients. Dr.'s Scott and Castille are both used by the VA to treat PTSD-positive veterans within the Baton Rouge area; 2) through direct contact with several veterans' organizations and self-help groups. Dr. Uddo-Crain provided contact points for numerous individuals who were in treatment with the VA Center for PTSD.
related problems and serving in key leadership positions within these veterans' organizations; and, 3) through the media. *Baton Rouge Advocate* columnist Smiley Anders mentioned our search for Vietnam veterans who might be experiencing problems in communicating with their mates. Classified ads looking for Vietnam veterans and spouses having marital communication problems were also placed in the *Advocate*.

A total of 600 survey packets were made available through direct contact with psychologists and veterans groups or through the mail to veterans group site managers and/or individuals responding to media requests. 248 packets were returned. However, 11 packets contained notes of substance abuse problems and 19 packets were missing either the veterans' or relational partners' surveys. Those 30 packets were excluded from the data set based upon the inclusion criteria advanced above. 218 couples returned completed packets through their psychologists, group social workers, veterans' group site managers or the U.S. mail.

The collection of subjects in this manner had three advantages over the original design: 1) Speed of access. The only approval process necessary was through the subjects directly or through Dr.'s Scott and Castille. This not only facilitated the speed with which data was collected, but presented the opportunity for a cross-regional sample without the lengthy approval process necessitated by the original design when crossing from one VA Region into another. As a result, data was collected from 218
veterans and their relational partners from across three states (Texas, Louisiana and Mississippi);

2) Increased strength of sample. Several clinic directors and/or VA psychologists suggested that the homogeneous nature of their self-help seeking veteran population might make correlational relationships difficult to demonstrate. Both Dr. Uddo-Crain and Dr. Judy Lyons (VA PCT Clinic, Jackson, Mississippi) cautioned that the majority of their patients' MSCRPTSD scores would fall into the 125-140 range, with the vast majority falling between 130 and 135. This comparatively narrow range would severely limit this study's ability to generalize conclusions. In addition, a cutoff score of 107 or higher is used to correctly identify 93% of PTSD-positive veterans (Keane, Caddell & Taylor, 1988; McCall, 1990). Again, the narrow range of scores provided by the VA clinical setting, would eliminate data from those PTSD-positive veterans with scores from 107 through 124. Representativeness of data collected from the entire spectrum of the variable of posttraumatic stress disorder was desirable. Data collected under the new design yielded scores which ranged from a low of 89 to a high of 141.

3) Increased trust which resulted in increased participation. Steve Lusk, President of the Baton Rouge Chapter of the Vietnam Veterans of America has suggested that most Vietnam veterans are highly suspicious of researchers. By meeting with the various veterans groups personally, veterans were allowed to ask questions that helped to put their minds at ease. As a result, they were more
cooperative with this researcher's efforts to collect data. While this is difficult to prove, a return rate of 41.17% (247/600) in approximately four weeks with very little follow up is atypical of this type of research collection design.

2.3 Ethics

Collecting data of a sensitive nature from PTSD-positive veterans presents unique challenges specific to the population. PTSD-positive veterans are often described as "hypervigilant" or "super-paranoid," (Brown, 1984; Carroll, 1983; DeFazio, 1975; King & King, 1991; Laufer, 1984; Shatan, 1978). Increased levels of anger and frustration often result in higher levels of conflict and relational violence (Matsakis, 1988; Parson, 1984; Wilson, 1978). Anxiety might be increased within some veterans and, in particular, their relational partners, if they perceive that their innermost secrets might be disclosed. Disclosure -- the opening up of one's self and/or one's relationship to another -- represents a vulnerable state. It requires trust: something PTSD-positive veterans find extremely difficult. As a result, sharing information which is perceived as intimate about their behavior within relationships is something many vets are reticent to do.

For the spouse, an "inappropriate" or "negatively perceived" response on their part might bring retribution from the angry vet. This fear of retribution from expressing one's true feelings might
promote "relationally correct" responses much as the current social climate promotes "politically correct" speech. This lack of openness not only makes data collection difficult, but would render any research design that does not address the issue of anonymity suspect.

The ethical considerations of how best to collect meaningful data upon which insightful conclusions might be derived must be balanced against any potential harm or loss to the relationship and/or the individual. To address these potential risks, the design of the research was modified in the following ways: 1) All research subjects were volunteers and briefed on the nature of the study prior to the collection of any data. 2) To avoid potentially volatile situations, extreme care was taken to insure that all participants understood and felt secure in the anonymous nature of the data collection for both participants. The design of the collection process insured that no one -- not even their relational partners -- would have access to their responses unless they elected to discuss the surveys with them. 3) All potential participants were advised that they were free to withdraw from the study at any stage in the collection process. All potential subjects were briefed and strongly cautioned prior to data collection that if at any time they felt the process was stressful to their relationships or threatening to themselves or their relational partners they should discontinue the survey process and exclude themselves from the study.
2.4 Instruments and Administration

Survey Packet Contents

Data collection was accomplished through the distribution of survey packets. Each packet contained a specific set of survey instruments; one set for the veteran and one for his or her relational partner. The veteran's set consisted of: 1) an instruction/demographic data sheet; 2) a Mississippi Scale for Combat-Related PTSD; and 3) the Modified Relational Communication Scale. The relational partner's set consisted of: 1) an instruction/demographic sheet; and 2) the Modified Relational Communication Scale. The relational partner's survey set was placed within a stamped envelope addressed to the author. This envelope, together with the veteran's survey set, was then placed into a larger envelope which was also stamped and addressed to the author. All packet contents (see Appendix 1) and both envelopes were coded to insure that data from individual couples could be collected.

Instruments

Instruction/Demographic Sheet

The instruction/demographic sheet (see Appendix) provided the subject with a brief explanation of the nature of the research
and was designed to reinforce the instructions given orally by the author or site manager. Instructions for the return of the packet contents to the author were included. The anonymous nature of the survey was stressed. Couples were encouraged to work independently, at their own speed and to answer questions as open and honestly as they could.

Demographic information included: sex (male=1; female=2); race (white=1; African American=2; Other=3; Hispanic American=4); Age; relational type (married=1; co-habitating=2); and length of relationship. In addition to demographic data, the veterans were asked to indicate their branch of service and to describe briefly their tour in Vietnam to include service dates, type of unit and significant actions.

The MSCRPTSD

The Mississippi Scale for Combat-Related PTSD (MSCRPTSD) was used to validate the presence of and to quantify the severity of posttraumatic stress disorder within the subject population (see Appendix). This scale was developed at the Jackson Mississippi Veterans Administration Medical Center PTSD Unit by Keane, Caddell & Taylor in 1986. Discriminant validity of the MSCRPTSD is supported by its high sensitivity in identifying PTSD positive patients with 93% sensitivity. The MSCRPTSD is a highly reliable and valid measure of the spectrum of PTSD symptoms in Vietnam.
combat veterans (Keane, Caddell & Taylor, 1988; McKelvie, 1990; Orr, Claiborn, Altman, Forgue, de Jong, Pitman & Herz, 1990). This scale is routinely used by the Veterans Administration and in private practice to diagnose the presence and severity of posttraumatic stress disorder.

The MSCRPTSD employs a five-point, multiple-choice format and requires respondents to indicate the perceived extent to which individual symptoms and features of PTSD are applicable. To provide balance and inhibit response bias, the measure contains both positively and negatively worded items. A total score is derived by summation across the 35 items (total possible - 175). Cutoff scores have been identified to suggest the presence or absence of PTSD based upon research with the MSCRPTSD applicable to Vietnam veterans. However, researchers vary on an appropriate diagnostic cutoff score. A score of 89 was used by Kulka et al. (1990) in the National Vietnam Veterans Readjustment Study. A cutoff score of 107 was found to point to a positive PTSD diagnosis in Vietnam theater veterans by Keane et al. (1988) in their validation study. The most current research by Uddo-Crain (1994) correctly classified 90% of subjects using a score of 107. However, in Uddo-Crain's research, those veterans with a mean score above 86 were classified as psychiatric, which would suggest at least some level of social maladjustment. Taking these findings into consideration, all subjects with a score above 89 on the MSCRPTSD will be included in the study population (N=218).
The Modified Relational Communication Scale

In 1987, Judee Burgoon and Jerold Hale conducted a series of three empirical studies to validate their previously advanced schema or topoi of relational communication (Burgoon & Hale, 1984). Their research used exploratory oblique and orthogonal factor analyses and confirmatory factor analysis. Seven of the original twelve themes were empirically validated through this series of studies. A reliable and valid measurement instrument for self-report and observational use in interactional studies of relational communication was created. The final recommended measurement instrument is a 30-item scale incorporating eight independent themes or clusters of themes: (1) immediacy/affection (intimacy I), (2) similarity/depth (intimacy II), (3) receptivity/trust (intimacy III), (4) composure, (5) formality, (6) dominance, (7) equality, and (8) task orientation. The items are cast in Likert format with a range of one (strongly agree) to seven (strongly disagree). To provide balance and inhibit response bias, the measure contains both positively and negatively worded items.

Subjects are asked to recall the last significant communication exchange with their partner and to answer questions regarding the nature of that exchange. The authors noted that a highly intimate interaction may cause the three, independent intimacy factors to collapse into a single, global measure of intimacy. The final
suggested measurement instrument yielded coefficient alpha reliabilities of .83 for intimacy I and .86 for Intimacies II and III. Throughout the studies, dominance consistently emerged as an independent relational theme. The coefficient of reliability for the Dominance theme was .76.

This research was conducted using a modified form of the Burgoon and Hale Relational Communication Scale. There is nothing in the PTSD literature to suggest that PTSD-positive veterans experience difficulty in relational communication dimensions other than those of intimacy and dominance/control (composure, formality, or task-orientation). Therefore, the focus of this research was directed toward the specific relational dimensions of Intimacy and Dominance. As a result, twenty-nine questions taken from Table 5 (Burgoon & Hale, 1987, 37-38) which dealt specifically with the relational dimensions of Intimacy and Dominance were combined into a modified measurement tool referred to as the Modified Relational Communication Scale (see Appendix).

This research also differed from Burgoon and Hale's original design (1984, 1987) in that participants were specifically asked to discuss and then agree upon the last significant communication exchange they shared. When attempting to compare differing perceptions of relational communication, it would seem logical that, due to the nature of the questions, valid comparisons could only be made if the participants were expressing attributions concerning the same communication event. For example, the statement "My
partner seemed to care if I liked him/her" would have very different meanings depending upon the nature of the recalled exchange. The communication behavior from an exchange classified as a "fight" would be remembered and perceived much differently than that of a "quiet" or "intimate talk." Couples were directed to agree upon the last significant interaction they had exchanged. Once the couples had agreed upon the communication event, they were asked to complete the questionnaires with only that interaction in mind.

Two additional concerns were addressed through the modification of Burgoon and Hale's design. First, if participants made differing attributions of relational communication behavior based upon the nature of the exchange and the engendered feelings, how might the topic, type and emotional outcomes of that exchange shape how it was evaluated? More significantly, if one recalled exchange represents a "snapshot" of the relational communication within the dyad, and positive exchanges lead to positive attributions while negative exchanges lead to negative attributions, how would this reliance on a single measure of relational communication impact the validity of more generalized conclusions of the nature of the communication when evaluated in its entirety? For example, a couple recalling the single positive conversation that they have exchanged over the past year might yield responses that would lead the researcher to an invalid conclusion: that this couple does not experience difficulty in their
relational communication even though the veteran has a MSCRPTSD score of 141. The implications for a false negative finding are just as valid.

Again, the Relational Communication Scale was modified to address these concerns. First, participants were asked to answer three "free response" questions concerning: 1) the topic of the conversation (e.g. money, career, children, sex); 2) how they would describe that conversation (e.g. discussion, disagreement, intimate sharing, fight, quiet talk); and 3. how their partner's communication made them feel (e.g. happy, sad, content, angry, depressed, anxious). Second, subjects were asked to respond to ten statements designed to measure their perceptions of the state of their relational communication in a more global sense. The questions were concerned with general feelings and impressions and not with any specific conversation or event in mind (e.g. Overall, I am satisfied with the level of intimacy that my partner and I share). Finally, a "free response" marital happiness scale was included to tap overall happiness. These measures are designed to collect qualitative data which will be used to gain insight into the quantitative data provided by the Modified Relational Communication Scale. Some aspects of relational communication are not easily understood or explained by using only quantitative data.
Administration

As previously described, subjects were gathered from three sources: 1) private practice; 2) veterans organizations; and 3) through the media. Initial contacts were made via telephone. The contact person was briefed on the nature and subject requirements of the research and asked to act as site manager for his or her practice, group or, in the case of individuals who responded to media ads, themselves.

Distribution and administration of survey packets to potential subjects was accomplished in three ways: 1) Dr. Owen Scott and Dr. Cathy Castille served as site managers for their individual private practices. Meetings were scheduled with Dr.'s Scott and Castille to explain the study in greater detail and to instruct them in the administration of the survey packets' contents. Subjects were volunteers from therapy groups. Social workers directing the groups actually administered the packets; 2) Officers, most often the Chapter or Group President, from the veterans organizations were contacted from a list initially provided by Dr. Uddo-Crain and Mr. Steve Lusk, State Vice-President of the Vietnam Veterans of America. Arrangements were made with the site managers to visit the group during its next meeting. Time was provided during the meeting to explain the nature of the research and to outline the requirements for subject inclusion. Volunteers were asked to stay after the meeting for further instruction. 3) Individuals responding
to media ads or columns were interviewed over the phone by the author. During the interview, potential subjects were asked questions to determine if they qualified for inclusion based upon the four inclusion criteria advanced above. Subjects then provided a first name only and a home address. Packets were mailed to the subjects.

2.5 Statistical Methodology

The first step after data collection was to obtain frequencies to determine if any recoding was necessary. The qualitative variables designed to provide insight into the type and topic of the recalled communication exchange and how that exchange made the participants feel were recoded to reflect an ordinal scale. This was necessary to make valid statistical comparisons between the qualitative variables and those variables from the Modified Relational Communication Scale already expressed in ordinal scales. This was the only recoding necessary.

The next level of statistical analysis was to address questions of internal consistency and to demonstrate that the modified scale was a reliable measure of the targeted relational themes or dimensions for the subject population. Scale construction and validation is the foundation upon which rests any valid analysis of statistical measures.
The original intent of this work was to conduct a confirmatory factor analysis comparing factor loadings from Burgoon and Hale's instrument (1987, 36) and those portions of the modified scale derived from their original work. In deriving their seven-factor solution as reported in Table 4, Burgoon & Hale used orthogonal factor analysis with varimax rotation and then subjected those factors to ordinary least squares confirmatory factor analysis as described in the work of Hunter & Cohen (1969). The final seven-factor solution produced factors that were internally consistent and parallel with the other factors in the model. The final factor structure and inter-factor correlations appear in Table 4 (1987, 32).

However, Table 4 only provides factor loadings for 19 of the 29 questions or statements suggested in Burgoon & Hale's final recommended scale as suggested in Table 5 (37-38). This table is more specific with regard to the relational topoi of Intimacy and Dominance and forms the basis for the Modified Relational Communication Scale used in this research. Since all factor loadings are necessary to perform a confirmatory factor analysis, Dr. Burgoon was contacted via telephone (October 6, 1993) and asked to provide the loadings for those 10 statements not included in Table 4 but included in Table 5 and the Modified Relational Communication Scale. She responded that she could not provide those additional factor loadings. Therefore, only a partial confirmatory factor analysis was possible.
This situation created numerous concerns with regard to the correct statistical methodology to pursue. Consultations were sought and provided by Dr. Barry Moser and Ms. Lillian Cutshell of the Department of Experimental Statistics at LSU. Both Dr. Moser and Ms. Cutshell advanced two reasons why a confirmatory factor analysis would not be valid in this case. First, Burgoon & Hale originally used an orthogonal factor analysis with varimax rotation. Orthogonal rotations are appropriate for a factor model in which common factors are assumed to be independent (Harmon, 1967; Johnson, 1992; Lawley & Maxwell, 1971). Burgoon & Hale's resulting factor structure confirmed three independent clusters or relational themes of Affection, Depth and Trust as reported in Table 4. However, Burgoon and Hale (1987) suggested that a highly intimate interaction might cause all of the intimacy factors to collapse into a single, global measure of intimacy, i.e., that some of the original factors are actually not independent in such circumstances. In fact, Burgoon and Hale also did an oblique factor analysis on their data to confirm such an expectation. Since a fundamental difference in the level of commitment between the subjects of some of Burgoon and Hale's work and this research exists (college students sharing classes vs. married and/or cohabitating partners), it would seem a valid concern that the three independent factors reported by Burgoon and Hale in Table 4 would not remain independent, but would collapse into a single scale reflecting interdependent factors.
Dr. Moser suggested that an independent factor analysis should be conducted prior to any confirmatory factor analysis to determine whether the three factors remained independent or collapsed into a single, interdependent factor. He suggested using the same method as Burgoon and Hale; that is, an orthogonal factor analysis with varimax rotation. If the factors remained independent and the factor structures were similar, then a confirmatory factor analysis could be attempted. However, if the independent factors collapsed into a single factor, trying to make valid statistical comparisons between factors derived from an orthogonal solution, in the case of Burgoon & Hale, and another statistical procedure valid for interdependent factors, such as an oblique factor analysis, would be impossible.

Second, a confirmatory factor analysis would require a comparison of Burgoon and Hale's original factor structure to the factor structure derived from the data of this research. Table 4 (Burgoon & Hale, 1987) reflects the final factor structure after all factors with loadings below the inclusion criterion were eliminated. Obviously, as Table 4 reflects a final solution, it does not report the loadings for those factors which were excluded from the solution. The numerical values of the factors within the final structure in Table 4 would be affected to some degree by the elimination of those factors with loadings below the inclusion criterion. Thus, the final factor structure would be changed to reflect stronger factor loadings for those factors which were retained by the factor
analysis. Since there is no way to reconstruct Burgoon and Hale's original factor structure, any comparisons with the goal of confirmation between factor structures would be invalid.

Since a confirmatory factor analysis was inappropriate at this point, the issues of scale construction and validation were addressed using the following method: First, the data were subjected to Cronbach's alpha reliability analysis and Pearson r correlational analysis. Second, principal components factor analysis was used to derive eigenvalues which were represented numerically and also visually with a scree plot. The eigenvalues were used to examine the direction and magnitude of the variability. The eigenvalues suggested a single cluster, or a factor structure which would express an interdependent relationship among variables within the Modified Scale. However, in keeping with Burgoon and Hale's original model, a principal components factor analysis with varimax rotation was conducted. This orthogonal method of factor analysis assumes independent factors and allows the computer to select its own factor structure. Maximum likelihood estimation was also used as the method to confirm the resulting factor structure. In both cases, the factor loadings reflected a single factor structure.

The factor structure and the Pearson correlation coefficients were used to eliminate factors from the Modified Relational Communication Scale used in this research. Variables were excluded from further analysis based on a dual exclusion criteria.
Any factor with a factor loading of less than .30 and a Pearson correlation coefficient of less than .30 was excluded. Once factors had been excluded, the remaining factors were again subjected to Cronbach's alpha for reliability. It should be noted here that under all methods of factor analysis the three independent relational themes or dimensions of Affection, Depth and Trust, reported by Burgoon and Hale, collapsed into a single, global measure of Intimacy. This would render the question of a confirmatory factor analysis moot.

Once scale construction and validation were completed, further statistical analyses were conducted using Pearson's r correlational formula as the primary method. Correlation is one of the most widely used analytic procedures in the behavioral sciences (Hinkle, Austin, Cox, 1988). It requires the assumption of a linear relationship between two variables: in this case the degree of PTSD symptomatology (as indicated by the MSCRPTSD score) and performance on the Modified Relational Communication Scale. Multiple Pearson correlations and coefficients were derived from the data as the veterans' MSCRPTSD scores were correlated to the 1) Intimacy and Dominance/Control Scores; 2) the exchange topic, type and negative/positive balance; 3) the ten global relational communication scores; and finally, 4) the marital happiness scale. Separate correlations were run for the veterans, their relational partners and for the couples in general.
Linear relationships between variables were verified using the Pearson $r$ correlational formula. Hinkle (1988) suggests that a scattergram be developed to make general observations prior to using the Pearson $r$ formula for statistical analysis. Some notion of the relationship between variables can be obtained simply by inspecting the visual image provided by the scattergram. In this case, a lower-left to upper-right slope indicated a positive correlation between variables. However, this procedure is not sufficiently precise for valid statistical analysis; therefore, a correlational coefficient was computed to describe the extent to which sets of data are related as a measure of the relationship between data. The absolute value of the coefficient indicates the magnitude of the relationship. Significant positive correlation coefficients ($>.50$) demonstrated a strong relationship between increased PTSD symptomatology and increased relational communication difficulties as posited by this research.
CHAPTER 3

FINDINGS

3.1 Scale Construction and Validation

As previously stated, the first step in the completion of scale construction and validation for the MRCS (Modified Relational Communication Scale) was to run frequencies. Primarily this was done for two reasons: 1) to check the accuracy of the data input; and 2) to verify that none of the data needed to be recoded. The qualitative variables designed to tap the type and topic of the recalled communication interaction and the resulting feelings engendered by that exchange for the participant were recoded to reflect an ordinal scale. This was necessary to make valid statistical comparisons between those qualitative variables and the quantitative variables already expressed in an ordinal scale within the MRCS. This was the only recoding necessary.

In an attempt to most closely duplicate the work of Burgoon and Hale, the MRCS was divided into two parts prior to any statistical analysis. The data collected from the Burgoon and Hale portion of the questionnaire (INT = intimacy; and, DC = dominace and control) was evaluated separately from the data representing the more general relational statements added to the questionnaire in this research (RELGEN = global relational perceptions).
Section 1

Once separated, scale construction and validation of the Burgoon and Hale portion of the questionnaire was begun. The raw data was subjected to a principal components factor analysis. The principal components method was used to derive eigenvalues. Eigenvalues are used to examine the direction (positive or negative) and magnitude of the variability in the correlation matrix. A general estimate of the number of clusters and how the variables might be expected to cluster, either independently or interdependently, can be derived by an examination of the eigenvalues. Eigenvalues were expressed both numerically and visually through a scree plot. Those values are expressed in Figure 1:

Figure 1
Eigenvalues for All Intimacy and Dominance/Control Items
Eigenvalues for the Correlation Matrix:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eigenvalue</td>
<td>17.008</td>
<td>2.776</td>
<td>1.483</td>
<td>1.097</td>
<td>1.028</td>
<td>0.866</td>
</tr>
<tr>
<td>Difference</td>
<td>14.232</td>
<td>1.292</td>
<td>0.385</td>
<td>0.069</td>
<td>0.161</td>
<td>0.205</td>
</tr>
<tr>
<td>Proportion</td>
<td>0.586</td>
<td>0.095</td>
<td>0.051</td>
<td>0.037</td>
<td>0.035</td>
<td>0.029</td>
</tr>
<tr>
<td>Cumulative</td>
<td>0.586</td>
<td>0.682</td>
<td>0.733</td>
<td>0.771</td>
<td>0.806</td>
<td>0.836</td>
</tr>
</tbody>
</table>

5 Factors were retained by the MINEIGEN criterion.

Note: Proportion reflects the proportion of the variance accounted for by that factor.

The amount of variance explained by each factor can be estimated by a relative comparison of the eigenvalues in Figure 1. In this case an eigenvalue of 17.008 for a single-factor solution as compared to an eigenvalue of 2.776 for a two-factor solution would indicate that a single-factor structure is most descriptive of these data. However, the Mineigen method retains the number of factors which remain within the slope of the scree plot. In this case, five factors remained within the slope of the plot. As a result, the principle components analysis attempted a five-factor pattern solution. An analysis of the five-factor solution confirmed the assumptions derived from the eigenvalues. Therefore, a single-factor solution was expected. Intimacy and Dominance/Control were expected to exhibit an interdependent relationship.

The principal components method above suggested that for this population an interdependent relationship existed between the factors taken from the Burgoon and Hale scale. However, in
an attempt to replicate Burgoon and Hale's work, the data was subjected to a final principal components factor analysis with varimax rotation. The final rotated factor pattern is reported in Table 1.

Table 1  
Principal Components Factor Analysis with Varimax Rotation for Intimacy and Dominance/Control

<table>
<thead>
<tr>
<th>Rotated Factor Pattern</th>
<th>FACTOR1</th>
<th>FACTOR2</th>
<th>FACTOR3</th>
<th>FACTOR4</th>
</tr>
</thead>
<tbody>
<tr>
<td>INT14</td>
<td>0.897</td>
<td>-0.263</td>
<td>0.009</td>
<td>-0.069</td>
</tr>
<tr>
<td>INT3</td>
<td>0.885</td>
<td>-0.288</td>
<td>-0.027</td>
<td>-0.147</td>
</tr>
<tr>
<td>INT18</td>
<td>0.877</td>
<td>-0.269</td>
<td>-0.048</td>
<td>-0.099</td>
</tr>
<tr>
<td>INT17</td>
<td>0.854</td>
<td>-0.288</td>
<td>0.035</td>
<td>-0.046</td>
</tr>
<tr>
<td>INT11</td>
<td>0.850</td>
<td>-0.127</td>
<td>-0.140</td>
<td>-0.134</td>
</tr>
<tr>
<td>INT2</td>
<td>0.849</td>
<td>-0.324</td>
<td>0.069</td>
<td>-0.057</td>
</tr>
<tr>
<td>INT19</td>
<td>0.845</td>
<td>-0.194</td>
<td>0.076</td>
<td>-0.122</td>
</tr>
<tr>
<td>INT20</td>
<td>0.842</td>
<td>-0.235</td>
<td>0.058</td>
<td>-0.030</td>
</tr>
<tr>
<td>DC2</td>
<td>0.840</td>
<td>-0.121</td>
<td>-0.065</td>
<td>-0.256</td>
</tr>
<tr>
<td>DC1</td>
<td>0.804</td>
<td>-0.218</td>
<td>-0.063</td>
<td>-0.357</td>
</tr>
<tr>
<td>DC7</td>
<td>0.801</td>
<td>-0.217</td>
<td>-0.011</td>
<td>-0.017</td>
</tr>
<tr>
<td>DC5</td>
<td>0.771</td>
<td>-0.303</td>
<td>0.067</td>
<td>0.045</td>
</tr>
<tr>
<td>INT1</td>
<td>0.754</td>
<td>-0.337</td>
<td>0.116</td>
<td>-0.146</td>
</tr>
<tr>
<td>INT4</td>
<td>0.717</td>
<td>-0.301</td>
<td>-0.041</td>
<td>-0.372</td>
</tr>
<tr>
<td>INT12</td>
<td>0.650</td>
<td>-0.517</td>
<td>-0.012</td>
<td>-0.134</td>
</tr>
<tr>
<td>INT10</td>
<td>-0.620</td>
<td>0.459</td>
<td>-0.087</td>
<td>0.112</td>
</tr>
<tr>
<td>DC3</td>
<td>-0.794</td>
<td>0.226</td>
<td>0.159</td>
<td>0.195</td>
</tr>
<tr>
<td>INT6</td>
<td>-0.827</td>
<td>0.334</td>
<td>0.129</td>
<td>0.215</td>
</tr>
<tr>
<td>INT9</td>
<td>-0.874</td>
<td>0.270</td>
<td>0.051</td>
<td>0.178</td>
</tr>
<tr>
<td>INT16</td>
<td>-0.452</td>
<td>0.810</td>
<td>0.052</td>
<td>0.004</td>
</tr>
<tr>
<td>INT13</td>
<td>-0.503</td>
<td>0.721</td>
<td>0.020</td>
<td>0.231</td>
</tr>
<tr>
<td>INT15</td>
<td>0.595</td>
<td>-0.683</td>
<td>-0.058</td>
<td>-0.041</td>
</tr>
<tr>
<td>INT7</td>
<td>-0.049</td>
<td>-0.048</td>
<td>0.794</td>
<td>0.090</td>
</tr>
<tr>
<td>DC9</td>
<td>-0.432</td>
<td>0.287</td>
<td>0.683</td>
<td>-0.055</td>
</tr>
<tr>
<td>INT8</td>
<td>0.347</td>
<td>-0.069</td>
<td>0.530</td>
<td>0.132</td>
</tr>
<tr>
<td>DC4</td>
<td>-0.126</td>
<td>0.044</td>
<td>0.451</td>
<td>0.740</td>
</tr>
<tr>
<td>DC5</td>
<td>-0.317</td>
<td>0.129</td>
<td>-0.049</td>
<td>0.678</td>
</tr>
<tr>
<td>DC8</td>
<td>0.095</td>
<td>0.002</td>
<td>0.596</td>
<td>0.169</td>
</tr>
<tr>
<td>DC6</td>
<td>0.039</td>
<td>-0.032</td>
<td>0.002</td>
<td>0.047</td>
</tr>
</tbody>
</table>

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All factor loadings above the inclusion criteria (>.30) are expressed in bold print. It would seem obvious that Table 1 most strongly confirms a single factor structure, which would reflect an interdependent relationship between previously separate factors. However, the data was subjected to further factor analyses using promax rotation, procrustean transformation, and the maximum likelihood method. No significant differences were found. In all factor structures INT 7, INT 8, DC 4-6, and DC 8 fell below the inclusion criteria of a factor loading of greater than .30.

Scale items were excluded from further statistical analysis based upon a dual inclusion justification. Pearson’s correlation analysis was run on the raw data comparing the factor’s correlational relationship with the MSCRPTSD score and correlation coefficients were reported for each item. Any item with a correlation coefficient and factor loading of less than .30 was excluded from the scale. Table 2 reports those items which failed the inclusion criteria:

<table>
<thead>
<tr>
<th>Items</th>
<th>INT7</th>
<th>INT8</th>
<th>DC4</th>
<th>DC5</th>
<th>DC6</th>
<th>DC8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Loading</td>
<td>-0.049</td>
<td>0.247</td>
<td>-0.126</td>
<td>-0.217</td>
<td>0.039</td>
<td>0.095</td>
</tr>
<tr>
<td>Coefficient</td>
<td>0.091</td>
<td>-0.253</td>
<td>0.168</td>
<td>0.085</td>
<td>-0.110</td>
<td>-0.101</td>
</tr>
</tbody>
</table>
At this juncture a decision relative to subsequent data analyses was necessary. H1 and H2 were predicated under the theoretical assumption that the relational topoi of Intimacy and Dominance/Control would reflect an independent relationship; however, the final factor structure reported in Table 1 reflected an interdependent relationship. How would this change in the dependent/interdependent relationship of the relational topoi impact subsequent analyses?

The relational topoi of Intimacy and Dominance/Control were treated as independent factors in subsequent data analyses. Four justifications were advanced: 1) In previous research the relational topoi of Intimacy and Dominance/Control most often demonstrated face validity as independent factors; 2) In support of face validity, Burgoon and Hale's research reported an independent relationship between factors. In an attempt to replicate their research findings, a close association between their research methods and this work would be desirable; 3) Any examination of Hypothesis 2 would be impossible without treating the Dominance/Control topoi as an independent factor; and, finally 4) Treating the Dominance/Control topoi as an independent factor allows for the maximum understanding of that factor's relationship to PTSD.

As the final step in the construction and validation of Section 1 (Burgoon and Hale's 29 item Relational Communication Scale), reliabilities using Cronbach's alpha were run on the data with those items which failed the inclusion criteria eliminated. Post scale
construction and validation reliabilities were 0.714 for the Intimacy factor and 0.807 for the Dominance/Control factor. A comparison of the Intimacy scale's initial reliability prior to the elimination of variables reflects minimal change in reliability (0.708 = + 0.06). However, only two variables from the Intimacy scale were eliminated. This could explain the minimal impact on the final reliability score. The Dominance/Control scale reflected a change in overall reliability from -0.130 to -0.807 or an increase of 0.647. Four variables out of the original nine were eliminated.

It should be noted here that Burgoon and Hale reported similar findings for their subscales of Equality and Control. In Table 4 (1987, 32), Burgoon and Hale's seven-factor solution included only four items. However, they suggested that for future measurement purposes, some additions to the current set of items may be warranted depending upon the facet of relational communication considered pertinent (36). In Burgoon and Hale's final recommended scale, taken from Table 5 of their work, nine items were recommended for inclusion in any subsequent research applications. Accordingly, the Equality and Control items from Table 5 were used as the basis for the Dominance/Control section of the Modified Relational Communication Scale used in this research. The factor analysis confirmed the same four items from Table 4 and one additional item from Table 5 of Burgoon and Hale's original work as reliable measures of Dominance/Control for this population.
In summary, after the elimination of those items which failed to meet the inclusion criteria, statistical analysis yielded a single factor structure comprised of eighteen variables for the Intimacy scale with an overall reliability of 0.71. The Dominance/Control scale also reflected a single-factor structure comprised of five variables with an overall reliability of 0.81.

Section 2

Section two consisted of the ten statements (RELGEN1-10) included in the MRCS with the intent of measuring the participants' perceptions of the global health of their relational dyads. Once again, the raw data was subjected to a principal components factor analysis to derive eigenvalues. The eigenvalues were used to examine the direction and magnitude of the variability. A general estimate of the number of clusters and how the variables might be expected to cluster, either independently or interdependently, was derived by an examination of the scree plot and the numerical values expressed in Figure 2:

Again, the amount of variance explained by each factor can be estimated by a relative comparison of the eigenvalues in Figure 2. In this case an eigenvalue of 5.988 for a single-factor solution as compared to an eigenvalue of 1.252 for a two-factor solution would indicate that a single factor structure is most descriptive of these data. However, the MINEIGEN method will retain the number of factors which remain within the slope of the scree plot. In this
case, three factors remained within the slope of the plot. As a result, the principal components analysis attempted a three-factor solution.

Figure 2
Eigenvalues for the Variable RelGen

Scree Plot

Eigenvalues:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.988</td>
<td>1.252</td>
<td>0.241</td>
<td>0.072</td>
<td>0.062</td>
<td>0.018</td>
</tr>
<tr>
<td>2</td>
<td>4.735</td>
<td>1.010</td>
<td>0.168</td>
<td>0.010</td>
<td>0.043</td>
<td>0.044</td>
</tr>
<tr>
<td>3</td>
<td>0.834</td>
<td>0.172</td>
<td>0.033</td>
<td>0.010</td>
<td>0.008</td>
<td>0.002</td>
</tr>
<tr>
<td>4</td>
<td>0.824</td>
<td>0.997</td>
<td>1.030</td>
<td>1.040</td>
<td>1.049</td>
<td>1.056</td>
</tr>
</tbody>
</table>

3 Factors were retained by the MINEIGEN criterion.

NOTE: Proportion reflects the proportion of the variance accounted for by that factor.
Principal components factor analysis with varimax rotation was used to provide the first factor structure. An initial rotated three-factor pattern is reported in Table 3.

Table 3
Principal Components Factor Analysis with Varimax Rotation for RELGEN:

<table>
<thead>
<tr>
<th>RELGEN</th>
<th>FACTOR1</th>
<th>FACTOR2</th>
<th>FACTOR3</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELGEN1</td>
<td>0.797</td>
<td>0.205</td>
<td>0.021</td>
</tr>
<tr>
<td>RELGEN2</td>
<td>0.787</td>
<td>0.314</td>
<td>0.243</td>
</tr>
<tr>
<td>RELGEN3</td>
<td>0.843</td>
<td>-0.028</td>
<td>0.256</td>
</tr>
<tr>
<td>RELGEN4</td>
<td>0.819</td>
<td>0.299</td>
<td>0.247</td>
</tr>
<tr>
<td>RELGEN5</td>
<td>-0.296</td>
<td>-0.788</td>
<td>-0.203</td>
</tr>
<tr>
<td>RELGEN6</td>
<td>0.817</td>
<td>0.443</td>
<td>0.174</td>
</tr>
<tr>
<td>RELGEN7</td>
<td>0.026</td>
<td>0.826</td>
<td>0.006</td>
</tr>
<tr>
<td>RELGEN8</td>
<td>0.720</td>
<td>0.069</td>
<td>0.047</td>
</tr>
<tr>
<td>RELGEN9</td>
<td>-0.263</td>
<td>-0.565</td>
<td>-0.503</td>
</tr>
<tr>
<td>RELGEN10</td>
<td>0.661</td>
<td>0.279</td>
<td>0.409</td>
</tr>
</tbody>
</table>

Variance explained by each factor

| Eigenvalue | 4.484 | 2.136 | 0.861 |
| % of variance | .599 | .285 | .115 |

Examination of the initial three-factor pattern in Table 3 demonstrated what appeared to be a possible two-factor solution with RELGEN1-4, 6, 8 and 10 loading best in Factor 1 and RELGEN 5, 7 and 9 loading together in Factor 2. This would indicate that the General Relationship portion of the MRCS was loading into two independent clusters which would yield two subscales. The first
subscale would comprise statements relating to perceptions of the overall state of the relationship (e.g. Overall, I am satisfied with the level of intimacy that my partner and I share). The second subscale would measure perceptions of the partners' specific communication behaviors (e.g. When faced with a difficult topic that needs to be discussed my partner seeks to control or dominate the discussion) in relation to their MSCRPTSD scores.

To confirm this suspicion, the data was subjected to an orthogonal method of factor analysis since the assumption was that the RELGEN scale was loading as two independent factors. Again, the principal components factor analysis with varimax rotation method was used. However, a two-factor constraint was placed on the solution. The final factor pattern is reported in Table 4:

Table 4
Two-Factor Solution for RELGEN

<table>
<thead>
<tr>
<th>Rotated Factor Pattern</th>
<th>FACTOR1</th>
<th>FACTOR2</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELGEN3</td>
<td>0.909</td>
<td>-0.025</td>
</tr>
<tr>
<td>RELGEN4</td>
<td>0.871</td>
<td>-0.346</td>
</tr>
<tr>
<td>RELGEN2</td>
<td>0.838</td>
<td>-0.361</td>
</tr>
<tr>
<td>RELGEN6</td>
<td>0.816</td>
<td>-0.456</td>
</tr>
<tr>
<td>RELGEN1</td>
<td>0.764</td>
<td>-0.195</td>
</tr>
<tr>
<td>RELGEN10</td>
<td>0.737</td>
<td>-0.340</td>
</tr>
<tr>
<td>RELGEN8</td>
<td>0.702</td>
<td>-0.067</td>
</tr>
<tr>
<td>RELGEN5</td>
<td>-0.310</td>
<td>0.808</td>
</tr>
<tr>
<td>RELGEN9</td>
<td>-0.279</td>
<td>0.642</td>
</tr>
<tr>
<td>RELGEN7</td>
<td>-0.003</td>
<td>-0.813</td>
</tr>
</tbody>
</table>
The factor structure in Table 4 confirmed that the two sets of factors, Perceptions (RELGEN1-4, 6, 8 and 10) and Behaviors (RELGEN5, 7 and 9), were loading independently. The assumption was that these two subscales were measuring two different things, or were at least behaving in two different ways. Cronbach's alpha was used to derive reliability for the two subscales. The Perceptions subscale demonstrated a reliability of .81. The Behavior subscale demonstrated a poor reliability of .17. In addition, the Eigenvalues seemed to indicate that the majority of the overall variance for the scale was accounted for by Factor 1 (relational perceptions) with an Eigenvalue of 5.988 as compared to Factor 2 (communication behavior) with an Eigenvalue of 1.252. As a result, though the Behavior subscale was loading independently it did not account for much of the variance measured by the RELGEN section of the MRCS.

On a second level of analysis, the inclusion criterion of factor loadings and correlation coefficients of greater than .30 was applied to the items from the Behavior subscale. The three items reported loadings and coefficients of RELGEN5 (-0.310/0.216), RELGEN7 (-0.279/-0.012) and RELGEN9 (-0.003/0.247). As the final step, reliabilities using Cronbach's alpha were run on the data with those variables which failed the inclusion criteria eliminated. Post scale construction and validation reliabilities for the RELGEN scale was .94, which reflected a +.13 increase in reliability.
In summary of Section 2, after the elimination of those items which failed to meet the inclusion criteria, statistical analysis yielded a single-factor structure comprised of six variables for the RELGEN scale with an overall reliability of 0.94. It should be noted here that all excluded factors reflected perceived partner communication behaviors. No significant relationships between the subjects' MSCRPTSD scores and subsequent communication behaviors were reflected by the correlation coefficients run on the raw data. This would seem to indicate that the subjects were able to access a number of different behavior strategies when engaged in communication with their relational partners.

Scale construction and validation resulted in factor structures which reflected an interdependent relationship among the Intimacy and Dominance/Control variables. However, due to the concerns previously advanced, Intimacy and Dominance/Control will be treated as independent in subsequent data analyses. The final solution validated two subscales: The first subscale provided insight into the relational themes or topoi of Intimacy and Dominance/Control. Final reliabilities for the subscales were .71 for Intimacy and .80 for Dominance/Control. In addition, a subscale designed to tap the perceptions of the relational partners in a more global sense was developed. The final reliability for the Relational Perceptions scale was .94. These three subscales were used as the foundation for all subsequent statistical analyses.
3.2 Results and Discussion

The results and discussion section is presented as an integrated unit to provide the reader with maximum clarity. Research questions and hypotheses are presented in the order in which they were addressed methodologically.

RQ2: Will the three dimensions within the relational theme of intimacy collapse into a single global measure?

In Burgoon & Hale's seminal work (1987), an orthogonal factor analysis with varimax rotation produced a factor structure which confirmed three independent factors within the relational topoi of Intimacy. Those three independent factors were labeled: 1) Immediacy/Affection; 2) Similarity/Depth; and, 3) Receptivity/Trust. However, some of Burgoon and Hale's original work was conducted with subjects taken from college classrooms reflecting relationships with low degrees of relational commitment, investment and risk. Consequently, Burgoon and Hale posited that using the scale to investigate communication exchanges from highly intimate relationships might cause the three independent intimacy factors to collapse into a single, global measure of intimacy (1987, 40).
The inherent differences between Burgoon and Hale’s study population and PTSD-positive veterans and their relational partners have already been discussed. Given these differences in study populations, it was expected that a factor analysis would yield a final factor structure supporting a single, interdependent relationship among factors. To confirm this expectation, Burgoon and Hale’s methodology was replicated. An orthogonal factor analysis with varimax rotation was used. The resulting final factor structure (reported in Table 1, 89) supported a single-factor solution. In addition, the data was subjected to further factor analyses using maximum likelihood with procrustean transformation and promax rotation. No significant differences were reported. As a final check, reliabilities were run on the remaining factors taken from the final factor structure. A single-factor solution yielded a reliability of .71. This would confirm Burgoon and Hale's theory concerning the collapse of their independent relational dimensions within the topoi of intimacy into a single, global measure. Burgoon and Hale (1987, 40) explain this phenomenon by saying, "It is important to stress that the nature of the interaction and the nature of the relationship among interactants may alter the factor structure, at times, causing more or fewer of these dimensions to emerge as relatively independent." For this population, involved in significant, long-term dyadic relationships, these intimacy themes are intertwined.
RQ₃: Is there a positive correlation between the factors of the Modified Relational Communication Scale and the "global" measure advanced within this research?

One of the initial concerns of this research was the "snapshot" quality of the Modified Relational Communication Scale as advanced by Burgoon and Hale. The original MRCS scale asks respondents to recall a single, significant communication exchange with their relational partner and then to respond to a series of statements based upon their perceptions of that event. Subject selection bias could have impacted the validity of any general relational conclusions based upon data provided by a single, recalled communication interaction. If the subject in question participated in a serious argument with his or her dyadic partner the night before the data was collected, a negative overall assessment of the relationship might seem a valid conclusion based upon the data collected. However, if the relationship was in a "honeymoon" phase and the participant engaged in a particularly positive exchange the night before data was collected, a positive view of the overall state of the relationship might seem a valid conclusion based upon the data reported. In either case, this "snapshot" of the relationship based upon a single, self-selected communication exchange would only be valid for that particular conversation and may not support a more general conclusion on the state of the relationship when taken as a whole.
To address this concern, ten questions were included in the MRCS which were designed to collect data on the state of the relationship with regard to participant satisfaction within the relational themes tapped by the Intimacy and Dominance/Control topoi of the original MRCS and perceptions of relational partners' specific communication behaviors. Once a factor analysis had been conducted and those factors which failed the inclusion criteria were eliminated, analysis was conducted to determine if a correlated relationship existed between the subjects' scores on the "single, self-selected and reported communication event" and the "global, relational perception" scale. The theory was that if a strong correlated relationship existed, then it could be argued that the participants' recalled interactions were a valid reflection of their perceptions of the overall state of their relationships; thus reducing the "snapshot" effect.

To investigate this question, scores for the participants were averaged across the Intimacy, Dominance/Control, and Global Relational Perceptions scales. Pearson's r correlational formula was used to derive coefficients. The results reported in Table 5 demonstrated a strong positive correlation between the scores on the Intimacy (0.88; p < .0001), the Dominance/Control (0.60; p < .0001) and the Global Relational scales. This translates to a finding that the portion of the MRCS concerned with subjects' perceptions of their last, significant communication exchange and their perceptions with regard to a global sense of the state of the
relationship exhibited a positive correlated relationship. Thus, the MRCS (developed by Burgoon and Hale) and the Global Relational Perceptions Scale (added in this research application) demonstrated a strong internal consistency and reflected a mutually supportive predictive role.

Table 5
Correlation Analysis of the "Snapshot" Effect

<table>
<thead>
<tr>
<th>Variable:</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>436</td>
<td>23.332</td>
<td>8.572</td>
<td>10173</td>
</tr>
<tr>
<td>Intimacy</td>
<td>436</td>
<td>69.266</td>
<td>11.478</td>
<td>30200</td>
</tr>
<tr>
<td>Dom/Control</td>
<td>436</td>
<td>17.454</td>
<td>2.725</td>
<td>7610</td>
</tr>
</tbody>
</table>

Pearson Correlation Coefficients / prob > |R| under HO: Rho=0 / N = 436

<table>
<thead>
<tr>
<th></th>
<th>Intimacy Total</th>
<th>Dom/Control Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Total</td>
<td>0.88146</td>
<td>0.60197</td>
</tr>
<tr>
<td></td>
<td>0.0001</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

RQ₁: Are there significant differences in the responses of PTSD-positive veterans and their relational partners on the Modified Relational Communication Scale?

The literature reports that PTSD-positive veterans experience significant difficulties within the relational domains of Dominance/Control and Intimacy. However, the literature is often silent with regard to how veterans' relational partners function
within these dimensions. Since reciprocity, a mutual exchange of intimate knowledge and information through positive communication behaviors, is necessary to the development of a healthy relationship and PTSD-positive veterans may be unable to meet this need, it was logical to expect that their potential partners would also experience difficulties functioning within the dimensions of Intimacy and Dominance/Control. However, each participant's perspective on the relationship might be radically different though they share similar dysfunctional behavior. The veteran may not perceive his controlling behavior as negative, but only as the natural state of the relationship. He may not view his "quiet," often "closed" behavior as a lack of intimacy. However, his relational partner may have significant problems coping with what she may define as his obsessive controlling behavior and complete lack of intimacy. The proposed measurement tool asks each participant the same series of questions, but each participant will perceive the relational communication behavior within the dyad from a unique perspective. Therefore, the data was examined for evidence of any significant differences between responses of the PTSD-positive veterans and their relational partners.

To answer this question the data was divided into two sets of scores to reflect the veterans and their relational partners. Once divided into veterans and partners, the scores across the variables were averaged. Differences were defined to be Veteran - Partner. Each variable score was then compared using paired t tests, which
is similar to a one-sample t test on differences (H: d=0 v Ha: d≠0).
The higher the number of comparisons made the greater the
likelihood of making a Type I error. To protect against a Type I
error Bonferroni’s approach to multiple comparisons was used (.05
divided by 2 times the number of comparisons (39) = Prob > | T | =
.0006). As a result any comparison where p < .0006 was considered
significant.

Significant differences between veteran and relational partner
responses were found on 17 statements or questions on the MRCS
and the Global Perceptions scale. Those differences are reported in
Table 6

Table 6
Response Differences for Veterans and Relational Partners

| Relational Partner's Perceptions of Veteran: | Mean: | Prob > | T | |
|---------------------------------------------|-------|--------|
| Partner's sincerity                        | -0.692| 0.0001 |
| Did not want a deeper relationship          | -0.220| 0.0002 |
| Communicated a sense of distance            | -0.454| 0.0001 |
| Didn't try to win my favor                  | -0.848| 0.0001 |
| Had the upper hand                          | -2.940| 0.0001 |
| Didn't attempt to influence                 | -1.270| 0.0001 |
| Becomes more aggressive                     | -2.509| 0.0001 |
| Needs to control the discussion             | -2.155| 0.0001 |

| Veteran's Perceptions of Partner:           | Mean: | Prob > | T | |
|---------------------------------------------|-------|--------|
| Partner's openness                          | 0.931 | 0.0001 |
| Partner made me feel similar                | 0.266 | 0.0001 |
| Considered us equals                        | 0.779 | 0.0001 |
| Wanted to cooperate                         | 0.798 | 0.0001 |
| Is supportive                               | 0.729 | 0.0001 |
| Becomes more quiet                          | 2.940 | 0.0001 |

Table 6 continued
Veteran's Perceptions of Self:

<table>
<thead>
<tr>
<th>Perception</th>
<th>Score 1</th>
<th>Score 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational satisfaction</td>
<td>0.839</td>
<td>0.0001</td>
</tr>
<tr>
<td>Feel secure in relationship</td>
<td>1.032</td>
<td>0.0001</td>
</tr>
<tr>
<td>Satisfied with communication shared</td>
<td>0.844</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

Note: Differences defined to be Veteran - Relational Partner. Negative means indicate that partners have a greater score than veterans.

While Table 6 does not report correlated relationships, but simply significant differences in the way veterans and their relational partners answered the questions or statements, the obvious dichotomy in perception is interesting. Veterans generally perceived of their relational partners as 1) more open in their communication; 2) made attempts to make the veteran feel more similar to themselves; 3) considered the parties as equals; 4) expressed a willingness to cooperate; 5) were supportive within the relationship and the communication exchange; and 5) became more quiet when faced with a difficult topic that needed to be discussed. Relational partners reported the veterans as being 1) more sincere; 2) not communicating a desire for a deeper relationship; 3) communicating a sense of distance; 4) had the upper hand during the communication event; 5) didn't attempt to win their patner's approval or to influence their partner; and 6) became more aggressive with a drive to control the relational communication when faced with a difficult topic that needed to be discussed. Finally, veteran's reported that they felt more secure in the relationships and more satisfied with the relationship in general.
and the communication that they shared with their relational partners than did their relational partners.

**RQ4:** Will increased PTSD symptomatology reflect a positive correlation with recalled interactions which focus on negative exchanges that produce negative feelings?

**RQ5:** If an inverse correlated relationship between PTSD and relational happiness exists, will there also be increased negative communication and dissatisfaction with the relational communication?

**RQ4** and **RQ5** are closely associated, and therefore, were considered as tapping similar relational issues. The PTSD literature discussed in Chapter 1 consistently reports that PTSD-positive veterans experience less successful interpersonal relationships. Dissatisfaction with personal relationships, unhappiness, and perceptions of significant problems are commonly reported by troubled veterans. The overwhelming conclusion within the research literature indicates that PTSD is correlated with decreased relational satisfaction. The question was what role, if any, negative communication might play in this correlated relationship. As a result, **RQ4** and **RQ5** were set-up to investigate the relationship between increased levels of PTSD symptomatology and decreased
relational happiness and increased negative communication behaviors.

The first question answered was whether an inverse correlated relationship existed between PTSD and marital happiness. Pearson's r correlation was used to derive a correlation coefficient for the variables MSCRPTSD and Relational Happiness. The result was a strong inverse correlation between PTSD and relational happiness (-0.727) that is highly significant (p = 0.0001). In addition, the couple's relational happiness score was correlated with the Global Relational Perceptions variables. Strong positive correlations between Relational Happiness and 1) satisfaction with level of intimacy (.722; p=0.0001); perceptions of partner's supportiveness (.778; p=0.0001); 3) relational satisfaction (.820; p=0.0001); 4) perceptions of relational security (.789; p=0.001); and 5) willingness of the partner to open up and share inner feelings (0.713; p=0.0001) were reported.

Since an inverse relationship was confirmed between PTSD symptomatology and relational happiness, the next step in the analysis was to investigate the relationship between PTSD and negative communication. First, the variables of recalled exchange type and how that exchange made the participant feel were expressed as ordinal values with higher values on the positive end. Spearman correlations are appropriate when using ordinal scales. A moderate correlation was found. There is a moderate negative association between an increase in the MSCRPTSD score and a
decrease in negative recalled exchanges and negative recalled outcomes. That is, as PTSD increases, there is a moderate rise in the number of negative communication exchanges (-0.364; p=0.0001) and resulting negative feelings (-0.282; p=0.001). This relationship was further broken down by separating the veteran and partner responses and then repeating the Spearman correlational analysis to derive coefficients. The relational partners reported a moderately stronger relationship between increased PTSD and a perception of negative communication events (-0.424; p=0.0001) as compared to veterans (-0.304; p=0.0001); however, veterans came away from the event with higher perceptions of negative feelings (-0.3398; p=0.0001) as compared to partners (-0.2258; p=0.0001).

One final area was explored. Participants were asked to identify the topic of the recalled interaction on the MRCS. One of the topics reported was relational disengagement or termination. Since relational failure is generally viewed as a negative event, was there an association between the topic of relational disengagement or termination and increased PTSD?

The Bartlet Chi Square test for independence of the MSCRPTSD score and the response of relational disengagement or termination was used. It was determined that Topic and MSCRPTSD score were not independent (Target Topic Mean =130.928; Std Dev = 12.089; All Other Topics Mean = 112.32; Std Dev. 13.529). The Cochran-Armitage Trend Test (this is equivalent to a t-test with target topic response as a grouping variable) was used to look for a
linear trend in the probability of the target topic response given an increase in the PTSD score. The conclusion was that the mean MSCRPTSD score is greater among the group who responded with the target topic (relational disengagement and termination) than among the group that did not (p< .0001). The data was further partitioned by veteran and relational partner. No significant differences were reported in the frequency of relational disengagement and termination between groups. A printout of the frequency of responses for each one point rise in MSCRPTSD score was used to plot the relationship between frequency of topic and MSCRPTSD score.

Figure 3
Graph of Target Topic and MSCRPTSD Score: Relational Disengagament and Termination

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While no direct linear relationship is reflected through the graph, MSCRPTSD score and an increase in the reported use of the topic of relational disengagement and termination among recalled interactions are not independent variables. Figure 3 reports this relationship.

$H_1$: Increased PTSD symptomatology will demonstrate an inverse correlation with the Intimacy topoi of relational communication.

As previously discussed, the literature indicates that veterans with positive PTSD symptomatology experience difficulty in getting close to others, in expressing messages of intimacy and trust, and allowing themselves to become vulnerable through close interpersonal relationships. The research is clear when it concludes that PTSD-positive veterans continue to experience difficulty in expressing intimate behavior. What is not clear is to what degree the social maladjustment (PTSD) impacts the subjects' ability to engender intimate messages within relational communication settings. Does the degree of impairment (PTSD) have an inverse relationship with the degree of intimacy perceived by the participants? Is there a difference in perceptions with regard to veterans or their relational partners?

The first step in testing this hypothesis was to create a collapsed data set. Intimacy scores and scores for those questions
within the Global Perceptions Scale which dealt with intimacy issues were averaged and divided into three groups: the veterans, their relational partners, and couples. Pearson's $r$ correlational formula was used to derive alpha coefficients for each data set. Table 7 reports those findings:

Table 7
Correlated Relationship of Intimacy to MSCRPTSD

<table>
<thead>
<tr>
<th>Variable:</th>
<th>MSCRPTSD score for</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Couple:</td>
<td>Veteran:</td>
<td>Partner:</td>
</tr>
<tr>
<td>Intimacy</td>
<td>-0.7724 p=0.0001</td>
<td>-0.8039 p=0.0001</td>
<td>-0.7390 p=0.0001</td>
</tr>
<tr>
<td>RELGEN1 Satisfied with the level of intimacy shared.</td>
<td>-0.6201 p=0.0001</td>
<td>-0.6528 p=0.0001</td>
<td>-0.6189 p=0.0001</td>
</tr>
<tr>
<td>RELGEN8 Easy for partner to open up and share inner thoughts feelings.</td>
<td>-0.6082 p=0.0001</td>
<td>-0.5799 p=0.0001</td>
<td>-0.6680 p=0.0001</td>
</tr>
<tr>
<td>RELGEN10 Satisfied with level of communication shared.</td>
<td>-0.6751 p=0.0001</td>
<td>-0.7965 p=0.0001</td>
<td>-0.6069 p=0.0001</td>
</tr>
</tbody>
</table>

Table 7 presents clear evidence that there are highly statistically significant ($p=0.0001$) inverse correlations between the MSCRPTSD score and the Intimacy topoi for couples, the veterans and their relational partners. Therefore, hypothesis 1 was confirmed on two levels. First, PTSD exhibited a strong inverse
correlation with the veterans' and relational partners' ability to engage in communication behaviors which engendered feelings of intimacy (with regard to their last, significant communication exchange). On a more general level, PTSD also exhibited a strong inverse relationship with a global perception of satisfaction with the level of intimate communication shared within the relationship (for both veterans and relational partners). Further, internal consistency between the two measures was demonstrated through a comparison of the alpha coefficients for the Intimacy portion of the MRCS and the variables from the Global Perceptions Scale designed to tap issues of intimacy. Again, this was conducted for couples, veterans and partners. Those relationships are reported in Table 8:

Table 8
Comparison of Correlations of Intimacy Variables to RELGEN:

<table>
<thead>
<tr>
<th>Global Perceptions</th>
<th>MRCS Intimacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Couples:</td>
</tr>
<tr>
<td>RELGEN1</td>
<td>0.7045</td>
</tr>
<tr>
<td>RELGEN8</td>
<td>0.6806</td>
</tr>
<tr>
<td>RELGEN10</td>
<td>0.7330</td>
</tr>
</tbody>
</table>

Once the hypothesis of an inverse relationship between PTSD and the relational topoi of Intimacy was confirmed, there remained the issue of interpreting the differences in coefficients for veterans and their relational partners. Fisher's Transformation was used to
assign a 95% confidence interval for the two population correlation coefficients. For veterans, the true population correlation coefficient was expressed in the interval -0.804 and -0.793 with -0.735 and -0.726 reflecting the interval for relational partners. Thus, there is a stronger inverse relationship between PTSD and intimacy for veterans than for their relational partners.

This finding collaborates the PTSD research literature which reported significant interpersonal difficulties with regard to issues of intimacy among PTSD-positive veterans. However, beyond confirmation for veterans, it should be noted that the difference between confidence intervals for veterans and their relational partners is quite small. The correlation between PTSD and intimacy for relational partners is only slightly weaker. In each case, increased PTSD symptomatology exhibited a strong negative impact on the participants' ability to engage in communication engendering feelings of intimacy and relational satisfaction.

These findings are consistent with communication theory. For much of the study population, posttraumatic stress disorder has created a relational environment in which intimacy has deteriorated. Central to any communication theory is the assumption that the experience of the individual is affected in a major way by the individual’s communication with others (Dance & Larson, 1976). Reciprocity would demand that both the veterans and their relational partners share equally in their responsibilities to foster communication behaviors which would define their
relationship in an intimate manner; thus, reinforcing global perceptions of relational intimacy and satisfaction. This negotiation process is critical to engendering and maintaining positive perceptions of self and the relationship. Obviously, relational participants who experience difficulty in expressing intimacy by engaging in honest, open communication seriously imperil their ability to pursue and/or sustain successful interpersonal relationships.

$H_2$: Increased PTSD symptomatology will demonstrate a positive correlation with the Dominance/Control topoi of relational communication.

One strategy for reducing the potential risks of a relationship is to "control" that relationship. The literature reports that PTSD-positive veterans often seek to control or dominate the interpersonal distance within the dyad. Increased aggression, conflict and relational failure resulting from the breakdown of trust and intimacy between participants is widely reported. What is unclear is the effect that PTSD has on the degree to which relational participants seek to control the dyad through messages of control and dominance. Does the degree of impairment reflect a positive correlated relationship with the drive to control or dominate the relational dyad?
The first step in testing this hypothesis was to create a collapsed data set. Dominance/Control scores and scores for those questions within the Global Perceptions Scale which dealt with Dominance issues were averaged and divided into three groups: the veterans, their relational partners, and a composite score for couples. Pearson’s $r$ correlational formula was used to derive coefficients for each data set. Table 9 reports those findings:

### Table 9
Correlated Relationship of Dominance/Control to MSCRPTSD

<table>
<thead>
<tr>
<th>Variable:</th>
<th>MSCRPTSD for Couple:</th>
<th>Veteran:</th>
<th>Partner:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominance/Control</td>
<td>-0.6737 p=0.0001</td>
<td>-0.7593 p=0.0001</td>
<td>-0.5462 p=0.0001</td>
</tr>
<tr>
<td>RELGEN3 Happy with relationship.</td>
<td>-0.7452 p=0.0001</td>
<td>-0.7826 p=0.0001</td>
<td>-0.7102 p=0.0001</td>
</tr>
<tr>
<td>RELGEN5 Becomes more aggressive when faced with a difficult topic to be discussed.</td>
<td>-0.7426 p=0.0001</td>
<td>-0.7428 p=0.0001</td>
<td>-0.7920 p=0.0001</td>
</tr>
<tr>
<td>RELGEN9 Seeks to control or dominate the discussion when faced with difficult topic</td>
<td>-0.6082 p=0.0001</td>
<td>-0.5799 p=0.0001</td>
<td>-0.6680 p=0.0001</td>
</tr>
<tr>
<td>RELGEN10 Satisfied with level of communication shared.</td>
<td>-0.6751 p=0.0001</td>
<td>-0.7965 p=0.0001</td>
<td>-0.6069 p=0.0001</td>
</tr>
</tbody>
</table>
Table 9 presents clear evidence that there are highly statistically significant ($p=0.0001$) inverse correlations between the MSCRPTSD score and the Dominance/Control topoi for couples, the veterans and their relational partners. In this case, as the MSCRPTSD scores increased perceptions of the relational partners' attempts to control or dominate the dyad decreased. Therefore, hypothesis 2 was not confirmed.

Internal consistency between the two measures was demonstrated through a comparison of the alpha coefficients for the Dominance/Control portion of the MRCS and the variables from the Global Perceptions Scale designed to tap issues of dominance and control. Again, this was conducted for couples, veterans and partners. Those relationships are reported in Table 10:

<table>
<thead>
<tr>
<th>RELGEN</th>
<th>Couples</th>
<th>Veterans</th>
<th>Partners</th>
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</thead>
<tbody>
<tr>
<td>RELGEN3</td>
<td>0.7552</td>
<td>0.8979</td>
<td>0.6244</td>
</tr>
<tr>
<td>RELGEN5</td>
<td>0.7545</td>
<td>0.8742</td>
<td>0.6562</td>
</tr>
<tr>
<td>RELGEN9</td>
<td>0.5545</td>
<td>0.7214</td>
<td>0.6532</td>
</tr>
<tr>
<td>RELGEN10</td>
<td>0.7571</td>
<td>0.8585</td>
<td>0.6230</td>
</tr>
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</table>
Since the hypothesis of a positive relationship between PTSD and the relational topoi of Dominance/Control was not confirmed, there remained the issue of interpreting the differences in coefficients for veterans and their relational partners. Fisher's Transformation was used to assign a 95% confidence interval for the two population's correlation coefficients. The reported confidence intervals are actually narrower, but due to rounding error (precision of the Fisher's Transformation Table) a more accurate estimate was not possible. The reported confidence intervals are conservative estimates. The actual confidence interval would be greater than 95%. For veterans, the true population correlation coefficient was expressed in the interval -0.786 and -0.808 with -0.544 and -0.558 reflecting the interval for relational partners. Thus, there is a stronger inverse relationship between PTSD and dominance for veterans than for their relational partners.

Before any interpretation, it should be noted here that these scores reflect the participants' perceptions of the communication behaviors of their relational partners. Therefore, the confidence interval derived from the alpha coefficients for veterans reflects the veterans' perceptions of their relational partners' use of dominating and/or controlling behaviors. The higher of the two confidence intervals reflects a stronger inverse relationship. In this case, a stronger inverse correlation between Dominance/Control and the MSCRPTSD score reported by veterans reflects a greater tendency for the veterans' relational partners to discontinue...
Dominance/Control strategies as the MSCRPTSD score rises. There remains a strong inverse correlation (alpha = -0.5462) between increased PTSD and a decrease in dominating/controlling behavior for PTSD-positive veterans. This finding reflects the contradictory nature of the research literature. At times, veterans are reported as exhibiting controlling behavior when faced with relational conflict. The findings reported under RQ3 would seem to confirm this characterization (relational partners perceived of the veterans as more aggressive and controlling when faced with a difficult topic that needed to be discussed). However, a growing body of research typifies veteran behavior as insulating himself from emotional risk by reducing involvement. Several observations present themselves.

It seems logical that as the PTSD symptomatology of the veteran increased, the relational partner's attempted use of communication strategies that would be interpreted as dominating or controlling by the veteran would decrease; especially, if the rise in PTSD was accompanied by more aggressive, dominating/controlling, and potentially violent behavior by the veteran. "Giving-in" may present the only viable and safe coping option for the relational partner.

While this might explain the findings in terms of the relational partner, it does little to explain the decrease in the use of dominating/controlling strategies by the veteran. A number of possible explanations present themselves. First, it should be noted
that the confidence interval associated with relational partners is much stronger than for veterans, -0.786 and -0.808 as compared to -0.544 and -0.558 respectively. Though veterans also decrease Dominance/Control strategies as the MSCRPTSD score increases, they do so more slowly than their relational partners. Some veterans may cling to Dominance/Control strategies longer than others. The inverse correlated relationship is a general trend; and therefore, may not be valid as predictive of a specific veteran's behavior given differing relational circumstances.

Second, the results reported under Section 1 of this chapter (Scale Construction and Validation) reflected none of the behavior-based variables yielded factor loadings high enough to retain any predictive value. It was concluded that no positive correlated relationship between PTSD and communication behavior existed for this population. As a result, participants were accessing a number of different communication strategies which were probably self-selected and dependent upon the situation. For example, a veteran participating in a negative exchange regarding relational termination might use a communication strategy designed to control or dominate the conversation by continuing the discussion but maneuvering it into a different topic area. Another veteran, in a similar situation, might simply withdraw by refusing to participate in further communication with his relational partner. In each case, the selection of strategy would be dependent upon the individual's perception of past successes or failures in using the

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strategy in question. Again, the trend towards a decrease in the use of dominance/control messages is general.

Third, a number of behaviors specific to this population may be contributing to the inverse relationship. Perhaps the veteran, sensing the loss of intimacy, has adopted a strategy of "relational control" through withdrawal from the relationship. One way to decrease his vulnerability would be to access the "emotional withdrawal" that has served as a successful coping mechanism in the past. In this case, examination of RQ4 and RQ5 reported an increase in PTSD as being positively correlated with an increase in negative exchanges, negative outcomes and discussions which increasingly focused on relational disengagement and termination. If the veteran has resigned himself to the eventual disintegration of the relationship, he may see no need to attempt to control or dominate the dyad, since the drive to control is most closely associated with the fear of loss. If the loss has been accepted, then the resulting uncertainty would be reduced. In this case, the data reported in RQ4 and RQ5 would seem to reflect a large number of dyads in relational crisis with one or both participants choosing the strategy of "opting out" of the relationship. This would reduce the use of the Dominance/Control topoi as an attempt at relational maintenance.

Finally, it should be remembered that the findings under Section 1 indicated an interdependent relationship between the relational topoi of Intimacy and Dominance/Control. Examination of H1 concluded with the existence of a strong inverse correlated
relationship between increased PTSD and Intimacy. Since Intimacy and Dominance/Control do not exhibit independence for this population, it seems logical that they would not reflect opposite relationships when correlated with PTSD.

These findings are consistent with communication theory. The negotiated process through which relational participants mutually define their roles and expectations within the relationship is critical for positive relational trajectories. Control entails who has the right to direct, delimit and define the actions of others within the interpersonal system (Burgoon & Hale, 1984). If that interpersonal system is in crisis, the participants have two choices. First, one could attempt to control the system and/or the other person; and some veterans may be guilty of this. Second, one could attempt to insulate oneself from the emotional pain by "opting out" of the relationship. The findings seem to indicate the use of both strategies. Selection would be dependent upon the individual's perception of relational viability. Further research would be required to fully explain the inverse correlated relationship between PTSD and behavior designed to exert Dominance/Control.

3.3 Conclusions

The PTSD literature is clear on four salient points: 1) competent communication is critical to maintaining positive perceptions of self and in engendering positive relational trajectories for dyadic
relationships; 2) relational participants who experience difficulty in expressing intimacy and engaging in open, honest communication seriously imperil their ability to pursue and/or sustain successful interpersonal relationships; 3) PTSD-positive veterans experience great difficulty in every area identified as critical to engendering positive relationship-building communication; and, as a result, 4) PTSD-positive veterans either avoid close interpersonal relationships or experience a significantly greater relational failure rate than their peers.

Though the link between posttraumatic stress and those need states or drives essential to engendering competent relational communication (trust, immediacy, affection, control) would seem to be well established within the literature, the current body of research fails to specifically establish the link between PTSD and communication behavior.

Littlejohn (1983) writes that any student who seeks to understand human activity must touch on communication processes in one form or another. To understand the impact that posttraumatic stress disorder has upon the human activity of seeking out and maintaining close dyadic relationships, the researcher must investigate the communication processes involved within that relationship. The literature concerning the critical role of competent relational communication in engendering positive relational outcomes is well defined. Central to any theory of interpersonal communication is the theoretical assumption that the
experience of the individual is affected in a major way by the individual's communication with others (Dance & Larson, 1976).

The intent of this research was to collect data which would support conclusions that would underscore the importance of the use of communication theory in the development of an integrated understanding of the effects of posttraumatic stress disorder on interpersonal relationships. In the pursuit of that research goal, data was collected from 218 PTSD-positive, Vietnam combat veterans and their relational partners using a modified version of Burgoon & Hale's Relational Communication Scale (1987). The final data set reflected a cross-regional sample from Texas, Louisiana and Mississippi.

Research participants were asked to recall the last, significant communication exchange between themselves and their relational partner and to respond to a series of statements, cast in a Likert format, designed to tap their feelings and perceptions with regard to the relational topoi of Intimacy and Dominance/Control. In addition, they were asked to identify the type of exchange, the topic of the exchange, and how the exchange made them feel. Finally, in an attempt to address methodological concerns regarding recalled single-event interactions, the participants were asked to respond to a series of ten statements designed to obtain more a global measure of the state of their relationships and perceptions of specific relational communication behaviors.
A variety of statistical methods were used during scale construction and validation. After frequencies and reliabilities using Cronbach's alpha were established, a factor analysis using principal components with varimax rotation produced a final single-factor structure. Items with low factor loadings (<.30) and low initial coefficients derived through Pearson's r correlation (<.30) were excluded from further analysis. A second factor analysis was run on the remaining factors. The end product resulted in three subscales with interdependent relationships among variables: 1) Intimacy; 2) Dominance/Control; and 3) Global Perceptions. Those three scales were used in all subsequent data analyses. Reliabilities for the scales were reported as 0.71 for Intimacy, 0.80 for Dominance/Control, and .94 for the Global Perceptions scale.

Initial findings included: 1) a confirmation of Burgoon and Hale's theory that the nature of the interaction and the relationship among interactants might alter the factor structure. They theorized that a highly intimate interaction might cause the three independent intimacy factors of Immediacy/Affection, Similarity/Depth and Receptivity/Trust to collapse into a single, global measure of intimacy; 2) Internal consistency between the MRCS (Modified Relational Communication Scale) as published by Burgoon & Hale and the Global Perceptions Scale was verified, thus reducing the concern that the single-event, recalled interaction would bias the validity of any general conclusions for this
population; 3) The suspicion that veterans and their relational partners would respond differently from one-another to the scales was confirmed. Each partner within the dyad identified different issues and communication behaviors as reflective of the other's situation. Participant profiles were described. In addition, it was determined that no single communication strategy was predominant when forced to deal with difficult topics; 4) PTSD exhibited a positive relationship with increased exchanges of a negative nature; to include type, topic and engendered feelings. PTSD also exhibited a significant positive relationship with exchanges that focused on disengagement and/or relational termination; and, finally 5) An inverse relationship between PTSD and overall relational satisfaction with regard to intimacy and communication was reported.

More far-reaching research conclusions designed to describe the relationship between posttraumatic stress disorder and the relational topoi of intimacy and dominance/control were reported as follows:

1) Intimacy -- A statistically significant, strong inverse correlated relationship between increased levels of PTSD symptomatology and the usage of intimate communication behavior in the recalled interactions and a general decline in satisfaction with the level of intimacy shared within the relationship were confirmed. As the level of PTSD increased, veterans and their relational partners reported a correlated rise in difficulty in feeling
and expressing intimacy. Confidence intervals were used to describe the finding that a stronger inverse correlated relationship existed for the veteran than for his relational partner. In conclusion, while both the veteran and his relational partner expressed difficulty in feeling and expressing intimacy, the difficulty was slightly more profound for the veteran.

2) Dominance/Control -- A positive correlated relationship between PTSD and the Dominance/Control topoi of relational communication was not confirmed. In fact, a statistically significant, moderate to strong inverse correlated relationship was reported in both the recalled interactions and in the global perceptions of the tendencies towards relational communication behavior. Confidence intervals were used to compare differences between the veterans and their relational partners. While both populations tended to use less communication designed to control and/or dominate the dyad as PTSD increased, significant differences were found in the rate at which those communication strategies were abandoned. In summary, relational partners tended to abandon dominance/control messages and behaviors much sooner than the PTSD-positive veterans. Again, the initial finding that no single communication strategy was reported as functioning exclusively to deal with difficult topics and/or situations would point to a model of communication strategy selection based upon the needs of the specific situation. It seems logical that the participant's perception of the long-term viability of the relational
dyad would greatly influence the participant's process of strategy selection.

Additional research should focus on three areas: 1) an investigation into the process of relational communication strategy selection and how that process might be affected by posttraumatic stress disorder would give researchers a clearer understanding of exactly how and why strategies are selected. Overt control, expressed through relational messages designed to dominate or control the other, is only one expression of relational power. More subtle expressions of power, through the control of dyadic space through the use of silence or sending messages which convey the intent to "opt-out," should be investigated; 2) Combat represents only one of the stressors humans experience as they go through life. If the stress produced by combat has such a debilitating effect on its victims' ability to engender positive relational communication, what impact might other stressful life-events have? Divorce, the death of a loved one, the loss of one's chosen profession, serious illness, retirement and aging all represent tremendous potential for creating abnormal levels of stress. The findings of this monograph point to a strong relationship between stress and dysfunctional relational communication behavior. The literature confirms the necessity of relationships for post-military social support. Veterans' perceptions of positive family support is the single most influential factor in mitigating the long-term effects of posttraumatic stress. If this is true, then the relational
communication that maintains those relationships is critical to long-term health. An integrated view of stress and its impact on competent relational communication should be pursued; 3) Prior research has tended to focus of relational topoi as operating independently of one another. Within close interpersonal relationships, the lines between relational topoi may become blurred or indistinct. In this research, it was demonstrated that the relational topoi of Intimacy and Dominance/Control reflected an interdependent relationship. Further research, which would explore how the relational topoi function within different types of dyadic relationships, should be conducted.

In conclusion, this research should establish the relevancy of relational communication theory in the pursuit of an in-depth understanding of the phenomenon of posttraumatic stress and its impact on the veteran's inability to sustain long-term, interpersonal relationships. Relational drives such as Affection, Trust, Inclusion and Control may be deeply rooted within a person's psyche; and as a result, the person may be successful in hiding them for a time. The horrors of combat may push them to a place from which they may never emerge. But to act on those drives is to express them. When they are expressed within relationships they become pathways of understanding. To walk those pathways is the work of the relational communication theorist.
BIBLIOGRAPHY


APPENDIX

SURVEY PACKET CONTENTS

Instruction/Demographic Sheet for Veterans

******** FOR SCORER'S USE ONLY ********

Couple # _______. Code: _______. Date: _______.

Collection site: ______________________________________.

********** END OF SHEET PART **********

This questionnaire has been designed to collect information on several aspects of communication within relationships. Its purpose is to further the understanding of communication within close relationships and to uncover ways of assisting people in improving their relational communication. In particular, we are interested in the communication difficulties sometimes experienced by veterans and their relational partners. Your participation is voluntary. You may withdraw from the study at any time. The information that you provide is for verification purposes only and will be kept strictly confidential. Not even your partner will know your answers unless you choose to discuss them with him or her.

The person collecting this study will explain the nature of the research and is ready to answer any questions you might have while filling out the questionnaire. It is important that you work separately and not discuss your answers with your partner until after the questionnaire has been completed. Because of the serious nature of the study, please consider your answers carefully and answer honestly.

Please provide us with the following information:

Sex: M F
Race: _______________.
Age: _____________.
Length of relationship: _______________.
Relational Status: _____ Married; _____ Living together.

* * * * * * * FOR VETERANS ONLY * * * * * * *

Branch of Service: _______________.
Briefly describe your tour(s) in Vietnam; such as service dates, type of unit, significant actions:

________________________________________________________________________

________________________________________________________________________
Relational Partner's Instruction/Demographic Sheet

******** **INSTRUCTION SHEET********

This questionnaire has been designed to collect information on several aspects of communication within relationships. Its purpose is to further our understanding of the difficulties combat veterans of the Vietnam War sometimes experience in communicating with their loved ones. The intent of the research is to discover ways to help your spouse to communicate what he is thinking and feeling more clearly.

Both you and your husband are important partners in your relationship. Your husband has volunteered to participate by filling out an identical questionnaire, but without your input, we won't be able to see the whole picture. No one knows your thoughts and feelings better than you and we sincerely want and need your special insight. However, you should understand that your participation with this survey is totally voluntary. You are free to withdraw at any time. Your husband has given you an envelope which contained this sheet and a short questionnaire. Won't you please fill them out and return them in the envelope provided?

We need you to be completely honest and open. Consider your answers carefully. We know how difficult this can sometimes be, but please understand that your answers will be kept completely confidential. No one will know your answers -- not even your spouse -- unless you decide to discuss them.

Select a time and place to take the survey where you can be alone with your thoughts. Take your time and don't feel pressured. When you are finished, seal this sheet and the survey into the envelope provided. Give it to your husband to return with his packet. Or, if you prefer, you may return it in the mail directly to the researcher at the address provided on the outside of your husband's packet.

Thank you for taking the time to help us to understand your thoughts and feelings. Remember, you are under no obligation to participate in this research. If you feel that this survey threatens you or your relationship in any way, you should feel free not to participate.

SEX: M F

Race: ____________.

Age: ________.

Length of Relationship: ________.

Relational Status: ___ Married; ___ Living together.

Control Code: ____________.

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MSCRPTSD

The Mississippi Scale for Combat-Related PTSD

Circle the number that best describes how you feel about each statement.

1. Before I entered the military I had more close friends than I have now.

   1  2  3  4  5
   Not at all Slightly Somewhat Very Extremely
   True True True True True

2. I do not feel guilty over the things I did in the military.

   1  2  3  4  5
   Never Rarely Sometimes Usually Always
   True True True True True

3. If someone pushes me too far, I am likely to become violent.

   1  2  3  4  5
   Very Unlikely Somewhat Very Extremely
   Unlikely Unlikely Likely Likely

4. If something happens that reminds me of the military, I become very distressed and upset.

   1  2  3  4  5
   Never Rarely Sometimes Frequently Very
   Frequently

5. The people who know me best are afraid of me.

   1  2  3  4  5
   Never Rarely Sometimes Frequently Very
   Frequently

6. I am able to get emotionally close to others.

   1  2  3  4  5
   Never Rarely Sometimes Frequently Very
   Frequently
7. I have nightmares of experiences in the military that really happened.

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8. When I think of some of the things that I did in the military, I wish I were dead.

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<td>Very Frequently</td>
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9. It seems as if I have no feelings.

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<td>Very Frequently</td>
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10. Lately, I have felt like killing myself.

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11. I fall asleep, stay asleep, and awaken only when the alarm goes off.

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12. I wonder why I am still alive when others died in the military.

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13. Being in certain situations makes me feel as though I am back in the military.

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14. My dreams at night are so real that I awaken in a cold sweat and force myself to stay awake.

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15. I feel like I cannot go on.

1  2  3  4  5
Not at All Rarely Sometimes Frequently Very
True True True True Frequently True

16. I do not laugh or cry at the same things other people do.

1  2  3  4  5
Not at All Rarely Sometimes Frequently Very
True True True True Frequently True

17. I still enjoy doing many of the things that I used to enjoy.

1  2  3  4  5
Never Rarely Sometimes Frequently Very

18. Daydreams are very real and frightening.

1  2  3  4  5
Never Rarely Sometimes Frequently Very

19. I have found it easy to keep a job since my separation from the military.

1  2  3  4  5
Not at All Slightly Somewhat Very Extremely
True True True True True

20. I have trouble concentrating on tasks.

1  2  3  4  5
Never Rarely Sometimes Frequently Very
True True True True Frequently True

21. I have cried for no good reason.

1  2  3  4  5
Never Rarely Sometimes Frequently Very

22. I enjoy the company of others.

1  2  3  4  5
Never Rarely Sometimes Frequently Very

23. I am frightened by my urges.

| Never | Rarely | Sometimes | Frequently | Very
|-------|--------|-----------|------------|------
| 1     | 2      | 3         | 4          | 5    |

24. I fall asleep easily at night.

| Never | Rarely | Sometimes | Frequently | Very
|-------|--------|-----------|------------|------
| 1     | 2      | 3         | 4          | 5    |

25. Unexpected noises make me jump.

| Never | Rarely | Sometimes | Frequently | Very
|-------|--------|-----------|------------|------
| 1     | 2      | 3         | 4          | 5    |

26. No one understands how I feel, not even my family.

| Not at all | Rarely | Somewhat | Very | Extremely
|------------|--------|----------|------|----------
| True       | True   | True     | True | True     |

27. I am an easy-going, even-tempered person.

| Never | Rarely | Sometimes | Usually | Very much so
|-------|--------|-----------|---------|----------------
| 1     | 2      | 3         | 4       | 5              |

28. I feel there are certain things that I did in the military that I can never tell anyone, because no one would understand.

<table>
<thead>
<tr>
<th>Not at All</th>
<th>Slightly</th>
<th>Somewhat</th>
<th>True</th>
<th>Very</th>
<th>True</th>
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<td>True</td>
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29. There have been times that I used alcohol (or other drugs) to help me sleep or to make me forget about things that happened while I was in the service.

<table>
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<tr>
<th>Never</th>
<th>Infrequently</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Very</th>
<th>Frequently</th>
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30. I feel comfortable when I am in a crowd.

| Never | Rarely | Sometimes | Usually | Always
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31. I lose my cool and explode over minor, everyday things.

\[
\begin{array}{cccccc}
1 & 2 & 3 & 4 & 5 \\
\text{Never} & \text{Rarely} & \text{Sometimes} & \text{Frequently} & \text{Very} \\
& & & & \text{Frequently}
\end{array}
\]

32. I am afraid to go to sleep at night.

\[
\begin{array}{cccccc}
1 & 2 & 3 & 4 & 5 \\
\text{Never} & \text{Rarely} & \text{Sometimes} & \text{Frequently} & \text{Almost} \\
& & & & \text{Always}
\end{array}
\]

33. I try to stay away from anything that will remind me of the things which happened while I was in the military.

\[
\begin{array}{cccccc}
1 & 2 & 3 & 4 & 5 \\
\text{Never} & \text{Rarely} & \text{Sometimes} & \text{Frequently} & \text{Almost} \\
& & & & \text{Always}
\end{array}
\]

34. My memory is as good as it ever was.

\[
\begin{array}{cccccc}
1 & 2 & 3 & 4 & 5 \\
\text{Not at All} & \text{Rarely} & \text{Somewhat} & \text{Usually} & \text{Almost} \\
& & & & \text{Always True}
\end{array}
\]

35. I have a hard time expressing my feelings, even to people I care about.

\[
\begin{array}{cccccc}
1 & 2 & 3 & 4 & 5 \\
\text{Not at All} & \text{Rarely} & \text{Somewhat} & \text{Usually} & \text{Almost} \\
& & & & \text{Always True}
\end{array}
\]
Modified Relational Communication Scale

**Instructions:** For this first set of statements, I want you to remember the last important conversation that you and your partner had. When I say important, I mean that the conversation lasted approximately fifteen minutes or more, you both participated in it and it was about something important to both of you. Think of that conversation and how it made you feel as you respond to the statements below. Using the following scale, circle your responses.

1 = Strongly disagree
2 = Disagree
3 = Moderately disagree
4 = Neither agree or disagree
5 = Moderately agree
6 = Agree
7 = Strongly agree

1. My partner was sincere.
2. My partner was interested in with me.
3. My partner was willing to listen to me.
4. My partner was open to my ideas.
5. My partner was honest in communicating with me.
6. My partner did not want a deeper relationship between us.
7. My partner was intensely involved in our conversation.
8. My partner found the conversation stimulating.
9. My partner communicated coldness rather than warmth to me.
10. My partner acted bored with our conversation.
11. My partner made me feel that we were similar.
12. My partner tried to move the conversation to a deeper level.
13. My partner communicated a sense of distance between us.
14. My partner acted like we were good friends.
15. My partner seemed to desire further communication with me.
16. My partner did not seem attracted to me.
17. My partner seemed to care if I liked him/her.
18. My partner wanted me to trust him/her.
19. My partner seemed interested in talking with me.
20. My partner showed enthusiasm while talking with me.
21. My partner considered us equals during the conversation.
22. My partner wanted to cooperate with me during the conversation.
23. My partner didn't try to win my favor during the conversation.
24. My partner tried to control the conversation.
25. My partner did not treat me as an equal during the conversation.
26. My partner attempted to persuade me that he/she was right.
27. My partner tried to gain my approval during the conversation.
28. My partner had the upper hand during the conversation.
29. My partner did not attempt to influence me. 1 2 3 4 5 6 7

**INSTRUCTIONS:** Once again, with that last important conversation in mind, please respond to the following questions. The words given in the examples are only "possible" answers that you might give. Feel free to use ANY word or group of words that best describes your situation or feelings.

What was the topic of conversation? (for example: money, career, children, sex, etc.)

______________________________________________________________

How would you describe the conversation? (for example: a discussion, disagreement, intimate sharing, fight, quiet talk, etc.)

______________________________________________________________

My partner's communication made me feel? (for example: angry, happy, content, sad, depressed, hopeful, etc.)

______________________________________________________________

**INSTRUCTIONS:** Finally, I am interested in your feelings about your relationship and the communication that you share with your partner in general. The following questions are concerned with general feelings and impressions -- not with any specific conversation in mind.

1 = Strongly disagree  2 = Disagree  3 = Moderately disagree  4 = Neither agree or disagree  5 = Moderately agree  6 = Agree  7 = Strongly agree

Overall, I am satisfied with the level of intimacy that my partner and I share. 1 2 3 4 5 6 7

My partner is supportive of me in our relationship. 1 2 3 4 5 6 7

I am happy with our relationship. 1 2 3 4 5 6 7

I am satisfied with our relationship. 1 2 3 4 5 6 7

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When faced with a difficult subject that needs to be discussed, my partner becomes more aggressive.

I feel secure in this relationship.

When faced with a difficult subject that needs to be discussed, my partner becomes more quiet.

It is easy for my partner to open up and share his/her inner thoughts and feelings with me.

When faced with a difficult subject that needs to be discussed, my partner seeks to control or dominate the discussion.

In general, I am satisfied with the communication my partner and I share.

Overall, with 10 representing absolute happiness and 0 representing absolute unhappiness, I would rate my relationship as a:

__________________

Thank you for your honesty and cooperation. Let me assure you, once again, that all of your answers will be kept totally anonymous. Not even your partner will know your answers unless you choose to discuss them. Once again, thank you for your commitment to deeping our understanding of your communication.
VITA

Jack E. Rogers received a Bachelor of Arts Degree in Speech Education with a minor in English from McNeese State University, Lake Charles, Louisiana, in 1983. Subsequent degrees include a Master of Arts in Speech Education (1985), post-Master's work in History and Psychology at McNeese State, and the completion of a Ph.D in Speech Communication from Louisiana State University in 1994. Mr. Rogers is an Assistant Professor of Speech & Drama and the Director of Forensics at Southern University in Baton Rouge, Louisiana.

Jack Rogers enlisted in the Oklahoma National Guard in 1975. He served a tour on active duty with the 3rd BN 34th Field Artillery at Fort Lewis, Washington from 1977-1980. In 1986, he attended the Officer Candidate School at the Louisiana Military Academy at Camp Beauregard, Louisiana. He was commissioned a 2nd Lieutenant in the Medical Services Corps in August of 1987. Now serving with the rank of Captain, his assignments have included a tour with the 3rd BN 156th Infantry Brigade as a combat medic platoon leader, an overseas assignment with the 7th Medical Brigade in Germany and as an adjutant staff officer with the 2224th Medical Detachment. He is currently assigned to the Adjutant General's Staff as an instructor of military subjects with the Louisiana Military Academy.
DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Jack E. Rogers

Major Field: Speech Communication

Title of Dissertation: The Legacy of America's "Forgotten Warriors:"
An Analysis of Dysfunctional Relational Communication Among Vietnam Combat Veterans Exhibiting Posttraumatic Stress Disorder Symptomatology

Approved:

[Signature]
Major Professor and Chairman

[Signature]
Dean of the Graduate School

EXAMINING COMMITTEE:

[Signatures]

Date of Examination:
April 4, 1994