

The Relationship Between Delayed Stress Reactions
And Social Support in Vietnam Veterans

by

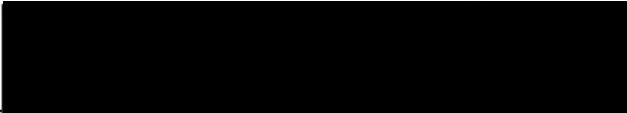
P. Ann Drum, R.N., B.S.N.

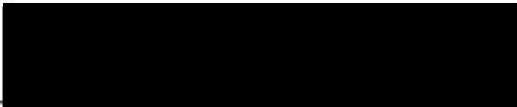
A Thesis

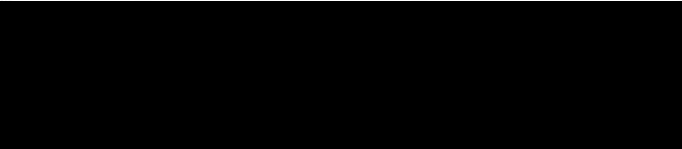
Presented to
The Oregon Health Sciences University
School of Nursing
in partial fulfillment
of the requirements for the degree of
Master of Nursing

June 1985

APPROVED:


Virginia Peterson Tilden, R.N., D.N.Sc., Associate
Professor, Thesis Advisor


Beverly Hoeffler, R.N., D.N.Sc., Associate Professor,
First Reader


David E. Collier, M.S., Second Reader


Carol A. Lindeman, Ph.D., Dean, School of Nursing

ACKNOWLEDGEMENTS

I wish to express my gratitude to the Vet Center for granting me permission to pursue this study, and the staff for their assistance during data collection. I would also like to thank the veterans and volunteers who helped me to better understand the problems "Vets" experience by giving me their time, knowledge and sharing of themselves.

I am especially indebted to Virginia Tilden, D.N.Sc. for her guidance and encouragement while I learned the process and documentation of research. I am also grateful for the expertise and support provided by Beverly Hoeffler, D.N.Sc. and David Collier, M.S. as my committee members.

Finally, I want to thank the staff of the Office of Research Development & Utilization and my classmates for their assistance and support. I would like to say to Laurie Clark and the Coburns, "Domo, Domo." I could not have done this without you. To my husband, Deryl, thank you for enduring my frustrations and absences and to John, my baby, for being a contented trans-Pacific traveler.

TABLE OF CONTENTS

CHAPTER		PAGE
I	INTRODUCTION	1
	SIGNIFICANCE	3
II	REVIEW OF LITERATURE	5
	THE VIETNAM WAR AND ITS VETERANS	5
	Global War Stress	5
	Unique Stressors of the Vietnam War	6
	Veterans' Homecoming Experience	9
	Social Climate After the War	10
	Effects of the War on Veterans' Mental Health	12
	Related Research	15
	CONCEPTUAL FRAMEWORK	26
	Stress	26
	Social Support	30
	THE RELATIONSHIPS AMONG THE PROBLEMS OF VIETNAM VETERANS' STRESS AND SOCIAL SUPPORT	35
	SUMMARY	38
	STATEMENT OF PROBLEM	39
	RESEARCH QUESTIONS AND HYPOTHESES	41
III	METHODS	44
	SUBJECTS AND SETTINGS	44
	INSTRUMENTS	45
	Vietnam Stress Scale	45
	Personal Resource Questionnaire	49
	PROCEDURE	53
	ANALYSIS OF DATA	54

CHAPTER	PAGE
IV RESULTS	56
CHARACTERISTICS OF THE SAMPLE	56
RESEARCH QUESTIONS	61
Research Question One	61
Research Question Two	62
Research Question Three	67
Additional Findings	70
V DISCUSSION	73
RESEARCH QUESTION ONE	73
RESEARCH QUESTION TWO	75
RESEARCH QUESTION THREE	77
ADDITIONAL FINDINGS	79
LIMITATIONS	81
IMPLICATIONS FOR NURSING	83
IMPLICATIONS FOR FURTHER RESEARCH	84
VI SUMMARY	86
REFERENCES	89
APPENDICES	96
A CORRESPONDENCE	97
B VIETNAM STRESS SCALE	102
C PERSONAL RESOURCE QUESTIONNAIRE	106
D INFORMED CONSENT	116
E TABLE	118
ABSTRACT	120

LIST OF TABLES AND FIGURE

TABLE	PAGE
1 Vietnam Stress Scale	47
2 Personal Resource Questionnaire	50
3 Characteristics of the Sample and Test of Significance Differences With Comparison Group	60
4 Correlation Between the Mean Frequency of the Provisions of Support and Delayed Stress Reaction Level	62
5 Rank Order of Sources of Support Across All Nine Situations and Correlations with Delayed Stress Reaction Level	64
6 Frequencies of Source of Support on Situations 3, 8, and 9 on the PRQ	66
7 <u>t</u> test for Situations 3, 8, and 9 with Delayed Stress Reaction Level and the Source of Support of Spouse, Friend/ Neighbor/Coworker, and Professional	68
8 Average Dissatisfaction With Sources of Support and Correlations With Delayed Stress Reaction Level Across All Situations and With Situations 3, 8, and 9	69
9 Rank Order & Percentile of Veterans Problems Described For Situation 9	72
 FIGURE	
1 Number of Subjects Who Served By Year	57

Chapter I

In recent professional and popular literature there has been much interest in the Vietnam veterans' readjustment after the war. In spite of President Ford's recommendation in April, 1975 for this period of American history to end (Blank, 1982), the war continues for some veterans. This continuation of the war can be described as symptoms of delayed stress.

Approximately 20% or 800,000 veterans experience symptoms of delayed stress (Egendorf, Kadushin, Laufer, Rothbart, & Sloan, 1981). Those veterans who are at highest risk for developing symptoms of delayed stress are those who were assigned to the combat zone, especially those who served after 1967 (Lipkin, Blank, Parson, & Smith, 1982; Egendorf et al., 1981). Egendorf et al. (1981) found these veterans had higher incidence of medical and psychological complaints; however, veterans with supportive wives and friends who were also Vietnam veterans had fewer symptoms of delayed stress. The results of the study by Egendorf et al. is congruent with social support literature which states that there is a consistent pattern of social support inversely related to psychiatric impairment (Dohrenwend & Dohrenwend, 1974; Cassel, 1974; Caplan, 1974; Cobb, 1976). Social support may

act as a buffer against the effects of stressful events (Kahn & Antonucci, 1980; Holahan & Moos, 1981; Sarason, 1979).

The positive effects of social support on the Vietnam veterans' ability to cope with the stress of combat experience has been established (Kadushin & Boulanger, 1981; Frye & Stockton, 1982). Also, the effectiveness of forming mutual support networks among veterans in rap groups and inpatient treatment programs has been reported (Berman, Price, & Gusman, 1982; Lipkin et al., 1982). Escobar et al. (1983) reported Hispanic Vietnam veterans with more symptoms of post-traumatic stress disorder (PTSD) had significantly smaller networks, fewer contacts outside the close family circle and more negative relationships with close family members. Escobar et al. (1983) also found that rap groups alone may not be sufficient treatment for veterans with psychopathology outlined in the Diagnostic and Statistical Manual of Mental Disorders (3rd ed.) (DSM-III) (American Psychiatric Association, [APA], 1980) criteria for PTSD.

Although the sources of support for Vietnam veterans have been discussed in the literature, no studies of the functions or provisions of social support have been reported for this population.

Therefore, the purpose of this study was to define the effects and functions of social support on Vietnam veterans' reactions to the stress of combat experience.

Significance

The four components of nursing theory, i.e., person, environment, health and nursing action, are related to this study. The person (Vietnam veterans), the environmental stressors from the war experiences, and the environmental effect of social support are explicitly studied. There is insufficient knowledge about social support to guide practice (Norbeck, 1981). Therefore, additional information on the effects of social support is needed to develop intervention studies that could direct nursing action. With the emphasis on the environment's effect on the person, this study increases nursing knowledge about environment, which Flaskerud and Halloran (1980) believes is insufficient in current nursing theories.

The social support instrument used for collection of data in this study was developed and tested by nurses. The information gathered about social support contributes to a national effort to be consistent in measurement of social support.

Egendorf et al. (1981) found that 37% of the Vietnam veterans eligible for care through the Veterans

Administration (VA) used VA services. Maxwell (1983) found that 135 combat veterans hospitalized for physical problems in a VA hospital also reported emotional symptoms, but only two received psychiatric consultations related to PTSD. Therefore, the knowledge generated from this study may be of interest to non-psychiatric nurses and disciplines other than nursing.

Chapter II

Review of Literature

The following review of the literature will cover the characteristics of the Vietnam war and its veterans and related research about Vietnam veterans. The conceptual framework will relate stress and social support theory to the specific problems of the Vietnam veteran.

The Vietnam War and its Veterans

The characteristics of the Vietnam war and its veterans are different from those of other wars. Of the four wars in which the United States fought during this century, the Vietnam war was the longest and most divisive (Egendorf, 1982). These differences affect the type of problems the veterans display and the treatment interventions. Global war stress, the unique stressors of the Vietnam war, the veterans' homecoming experience, the social climate after the war and the effects of the Vietnam war on its veterans will be discussed.

Global War Stress.

Blank (1982) stated that the psychic trauma of any war includes the threat of annihilation; observing multiple deaths, dismemberment, mutilation, agony and bodily destruction of both friends and enemies; poor

living conditions and the development of a psychic state that allows the soldier to attack and kill others over an extended period of time. To this list Lipkin et al. (1982) added exhaustion; separation from home, family and friends; the general sensory assault of combat; and the fighting itself. Lipkin et al. (1982) also described the fear of being hit by an unseen sniper, one's own artillery misfiring, or being bombed by mistake by other American troops.

Unique Stressors of the Vietnam War.

The political climate of the Vietnam war produced stressors that were different from other wars of this century. One reflection of the political climate was that Congress never officially declared war. The national unrest that was created led to draft dodging, demonstrations by activists, debates on the morality of the war, and attacks on the soldiers who fought in the war (Huppenbauer, 1982). Due to political and social antagonism, soldiers were unable to integrate the death, destruction, and killing into a stressful but legitimate part of their life (Lipkin et al., 1982; Huppenbauer, 1982). This was especially true if family or friends did not acknowledge their experiences. This lack of support made many soldiers question their participation in the war. In fact, many soldiers felt

the war was meaningless, absurd, and wasteful (Egendorf et al., 1981).

The sense of powerlessness and demoralization was also perpetuated by the military strategy of forbidding a unified effort to win the war (Huppenbauer, 1982). The progress of the war was measured by body count, not by terrain gained. Therefore, the territory would be taken and then troops would be pulled out so that a piece of territory might be retaken more than once a year. This led to a "survivor mentality", i.e., the soldiers' goal was to stay alive until their tour of duty was up (Resing, 1982). The unconventional guerrilla warfare created additional stress because the soldier could not distinguish the enemy from civilian non-combatants (Lipkin et al., 1982; Huppenbauer, 1982; Goodwin, 1980). This led to a substantial number of atrocities, both accidental and willful (Blank, 1982), as well as necessitating a constant vigilance for possible terrorism (Lipkin et al., 1982). In an attempt to reduce this stress, the soldiers' length of combat was limited to a one year tour of duty. Soldiers were rotated to a safe area on the specific date when their year of duty was completed. With this individual rotation, the soldiers did not have a sense of continuity with other soldiers who were in their

unit before or after them; subsequently, the support provided by the soldiers' unit in the past wars was absent (Goodwin, 1980).

Another unique factor in the Vietnam war was that these soldiers were younger in age than soldiers of previous wars; the average age of the Vietnam soldier was 19.2 years (Egendorf et al., 1981). Wilson (1978) stated that this increased the soldier's susceptibility to the stress of the war because the soldier was at the beginning of the normative process of the stage of "identity formation," described by Erikson (1968). The widespread use of alcohol and illicit drugs reduced the soldiers' awareness and the emotional impact of the war. This contributed to long term substance addiction problems and delayed symptoms of the emotional disturbances from the war (Horowitz & Solomon, 1975).

In spite of these factors, there were fewer emotional casualties during the war itself than in previous wars. The military attributed this to four principles of their psychiatric treatment. First, soldiers were treated as quickly and as close to their combat unit as possible. Second, therapy included suppression and repression of disturbing material instead of using exploring or uncovering techniques of therapy. Next, soldiers were expected to return to

their jobs immediately after treatment was ended. Last, if soldiers need to be evacuated from their units, they went to the nearest psychiatric facility with a psychiatrist (Jones & Johnson, 1975). The number of psychiatric casualties appeared smaller because of the classification system for mental illnesses during the Vietnam war. According to the Diagnostic Manual of Mental Disorders (2nd ed.) (American Psychiatric Association, [APA], 1968), transient situational reactions to an overwhelming environmental stress in persons without mental disorders were included in the category of character disorders. Soldiers diagnosed as character or behavior disorders received administrative disciplinary actions or discharges by their supervisors instead of treatment as psychiatric casualties (Boman, 1982). Alcohol and drug use were viewed as symptoms of a personality disorder unrelated to the stress of the war. Soldiers with side effects or aberrant behaviors due to alcohol or illicit drug use were seen as problematic to the military, and these soldiers received administrative discharges. This further reduced the number of emotional casualties during the war (Goodwin, 1980).

Veterans' Homecoming Experience.

Once soldiers left the stress of combat and

returned home, their stress diminished but was not eliminated. Due to the rapid return, sometimes as little as 36 hours between combat duty and being home, the soldiers had no time for decompression or working through their experiences (Goodwin, 1980). Also, they were unable to be reoriented to the changes in the American culture (Huppenbauer, 1982). Many of the veterans found the contrast of the combat zone and home towns so great that they rejected attempts by family and friends at celebrations. The returning veterans also encountered the hostility and indifference of the social and political climate and were labeled as "doper" or "baby killer" (Resing, 1982). These experiences increased the veterans' guilt and sense of alienation from society. Therefore, the veterans were frequently unable to find someone who would listen to them or help them work through their experiences.

Social Climate After the War.

Political and social policies following the end of the war in 1975 affected the Vietnam veteran. One factor was that the war was prolonged and ended chaotically with the total defeat of the United States-supported Saigon government. There has been no reconciliation between the governments, and veterans have had difficulty visiting Vietnam, even vicariously

through the news media, until recently. Thus, the veterans were unable to use that kind of contact to resolve emotional problems stemming from their experiences. With the influx of Vietnamese refugees, some of the veterans' problems are precipitated or exacerbated by encounters with them. These refugees receive the government's sanction and the moral support of local communities that did not support the veteran. Further, American society has attempted to black out this period of history. With this social climate, the veterans were unable to reflect on their experiences and the meaning of those experiences (Blank, 1982).

Veterans had difficulty obtaining treatment for their war related symptoms. Blank (1982) stated that this may be due to the emotional, intellectual, and moral conflicts over the war causing countertransference blocks with therapists. The lack of an official diagnosis for delayed stress symptoms until DSM-III was published in 1980, made it difficult for veterans to receive treatment. The cultural and generational differences between therapists and veterans impeded therapeutic relationships. Therapists had difficulty listening to the painful war experiences of the veterans. The negative public image of the veteran was fostered by the general public's confusion

of the warrior and the war. Some therapists focused on individual endogenous psychopathology instead of including in their treatment the social, political and economic problems of the veteran. For minority veterans, the lack of minorities in the mental health profession created further problems in the treatment setting.

Effects of the War on Veterans' Mental Health.

Approximately twenty percent of the Vietnam veterans may have symptoms of PTSD (Egendorf, 1982). PTSD is defined in DSM-III as, the difficulties a person experiences following a traumatic event that is generally outside the range of usual human experience (e.g., natural disasters, military combat, and rape). The characteristic symptoms include recurrent and intrusive recollections or dreams about the event, markedly diminished interest in significant activities, feelings of detachment or estrangement from others, constricted affect, hyperalertness or exaggerated startle response, sleep disturbance, guilt, memory impairment, and difficulty in concentrating. These symptoms are often intensified by environmental factors that resemble or symbolize the original trauma. These symptoms may occur immediately after the trauma or after a latency period of months or years.

Lipkin et al. (1982) described four types of psychosocial problems experienced by Vietnam veterans: specific psychological symptoms, alterations in life course, difficulties relating to significant others and a profound destruction of concepts of self and reality. The specific psychological symptoms are divided into eight categories. First are classical traumatic neurosis symptoms including anxiety, depression, irritability, spells of rage, flashbacks, numbing of affect and sleep disturbances. Second, impacted grief may be the first noticeable symptom. Third, veterans may have psychosomatic complaints that are chiefly physical complaints. Fourth, a cluster of symptoms that includes violence, paranoia, suspicion, irritability, hostility, and frequently phobia about crowds may be the veteran's residual responses to the war's atmosphere of terrorism. The fifth group of symptoms include addiction to alcohol, drugs, gambling, or thrills and risk taking; substance abuse has been reported as masking an underlying PTSD (Lacoursiere, Godfrey, & Ruby, 1980). Sixth, minor characterological traits that existed prior to the war may be greatly exacerbated. The seventh category is suicide and homicide, but there is no objective data demonstrating a higher incidence of suicide or homicide by Vietnam

veterans than by other young males. Eighth, chronic or intermittent psychosis-like symptoms and severe life impairment has been found in Vietnam veterans.

Alterations in life course are manifested through the veterans' chronic underachieving and instability in education or work, a wandering lifestyle, and antisocial, criminal acts that are primarily related to PTSD and not to preexisting criminality. The veterans' difficulty in relating to significant others is demonstrated in difficulties in achieving intimacy with a spouse or lover, difficulties in relating adequately to one's own or others' children, marked change in the veteran's sense of relatedness to America and its institutions, and some degree of general alienation and detachment for normal life processes that lead to social and vocational ineffectiveness. Veterans with stress disorders may experience a profound shattering of their basic concepts of self and humanity. This is also described as a loss of the veteran's basic faith in humanity's capacity for goodness (Lipkin et al., 1982).

Egendorf (1982) believed the difficulties currently experienced by Vietnam veterans support the DSM-III classification of PTSD, but that the veterans' delayed stress reactions should not be limited to the

DSM-III criteria. He suggested that the lack of differences between veterans and their peers reported in Legacies of Vietnam (Egendorf et al., 1981) may be due to the inadequacy of the DSM-III criteria to describe the postwar malaise found in many veterans.

Related Research.

Descriptive research has focused on the effects of the Vietnam war on its veterans. From 1976 to 1977, Wilson (1978) studied a self-selected sample of 355 Vietnam veterans living in the Cleveland, Ohio area. The sample was stratified to approximate the number of men from each branch of the service who served in Southeast Asia, and equal numbers of combat and non-combat veterans were solicited by race. These veterans were compared to a matched control group of Vietnam era veterans who served outside of Southeast Asia. Structured interviews with probing were used to evaluate the veterans' identity integration and emotional readjustment. Wilson found that combat veterans had more difficulty developing a coherent sense of ego identity and successful interpersonal and love relationships, and finding a happy, productive, and creative place in society. Combat veterans experienced more cognitive changes in their perception of society, social institutions, and authority

relations. Some veterans had profound and radical change in their ideological perspective and system of values; other veterans changed in a more subtle, and less dramatic manner. This landmark study identified a causal relationship between the veterans' war experiences and their difficulties readjusting to civilian life, but did not delimit other factors that helped veterans readjust to civilian life.

Additional research on the readjustment of Vietnam veterans was mandated by Congress. The final report, Legacies of Vietnam, was submitted to the Committee on Veteran Affairs, U.S. House of Representatives on March 9, 1981. In this study, 1,340 American men whose ages were within the range of those eligible for military service during the peak war years (1964 to 1972), were sampled. The group included veterans who served in Vietnam, other Vietnam era veterans who did not serve in Vietnam, and non-veterans. Using a standardized set of questions, each person was interviewed for three to five hours. The areas of adjustment studied were educational careers and benefit utilization; occupational careers; mental health; capacity to deal with stress; drug and alcohol use; arrests and convictions; marital status and satisfaction; peer integration and the nature of friendship networks; and

resolution of the emotional problems that were a result of their war experiences. Because of size and complexity, the study was divided into four sections. In the summary of the findings from these four sections, Egendorf et al. (1981) stated that those veterans who actually served in Vietnam had significantly more difficulties than their peers. These problems included less education, lower status jobs, greater use of alcohol and drugs, higher rates of arrest, and a higher incidence of medical and psychological complaints.

The specific section in Legacies of Vietnam of interest to this study is found in "Vol. IV Long term stress reactions: Some causes, consequences, and naturally occurring support systems". In this section, Kadushin, Boulanger, and Martin (1981) stated that the veterans who served in Vietnam were three times as likely to have been stressed during the war and for one year following the war as Vietnam era veterans or non-veterans. During that same period of time, other Vietnam era veterans were twice as likely to have been stressed as nonveterans. Blacks and Chicanos were more stressed by their experiences than whites. When comparing blacks and whites, being in Vietnam was as stressful for blacks as combat experiences were for

whites.

Kadushin et al. (1981) also examined the stress levels of Vietnam veterans, other Vietnam era veterans and nonveterans at the time of the study, December 1976 to October 1979, as well as immediately after the war. At the time of the study, more than one third of the Vietnam veterans with heavy combat experiences were stressed while less than one fifth of the nonveterans and other Vietnam era veterans were stressed. Nearly seventy percent of black veterans with heavy combat experience were stressed. When comparing black and white Vietnam veterans' current stress levels, 40% of the black and 20% of the white Vietnam veterans were stressed. Vietnam veterans with heavy combat experience who were stressed after the war continued to demonstrate stress levels 10% higher during the study than the veteran with little or no combat experience. Black veterans who were stressed after the war were 12% more likely to have stress levels higher than white veterans. Higher levels of stress in Vietnam veterans, especially combat veterans, were associated with lower current educational attainment, lower income, and irregular or unsatisfying employment at the time of the study. These veterans with higher stress levels also had more vocational problems. Therefore, the veterans'

race and the amount of combat experience were key factors influencing the veterans' stress levels during the war and for one year afterwards as well as at the time of this study, 1976 to 1979.

In journal articles published after Legacies of Vietnam was submitted to Congress, the research findings from this study regarding the effect of combat exposure on veterans' delayed stress were expanded and revised (Laufer, Gallops & Frey-Wouters, 1984; Yager, Laufer & Gallops, 1984). As part of the data collection for Legacies of Vietnam, the 350 Vietnam veterans were surveyed for two types of war stress: exposure to combat and exposure to abusive violence. The combat exposure was measured with the Combat Scale, a 14 point checklist of combat experiences. The exposure to abusive violence was measured by a set of open-ended questions in which the veterans were asked to describe any abusive violence or atrocities in which he had participated or witnessed. The researchers found exposure to combat and abusive violence moderately correlate ($r = .43$) but are not the same dimension. The mean level of combat exposure was significantly higher for veterans who witnessed or participated in abusive violence than for veterans who were not exposed to abusive violence. Combat exposure

was associated with arrests and convictions (generally for nonviolent crimes), drinking and symptoms of delayed stress after the war. Participants in abusive violence had more delayed stress symptoms and more heroin and marijuana use than other veterans. Also, the veterans who participated in abusive violence and who had more delayed stress symptoms seemed to be unable to dehumanize the victims of the abusive violence (Yager et al., 1984).

Kadushin et al. (1981) studied the level of stability in the families of origin and the natural support systems in the sample of men interviewed for Legacies of Vietnam. The answers to questions about the family of origin were grouped into three categories: most stable family, average family, and least stable family. Veterans from the most stable families were likely to have stress reactions after exposure to heavy combat experience. Veterans from average families were more likely to have stress reactions in response to even low amounts of combat. The level of combat experience did not greatly affect the response levels of veterans from the least stable families. In fact, these veterans may develop stress reactions simply in response to daily life stressors.

Based on a review of the literature, marital

status was viewed as a social status variable that was a rough, but useful, indicator of intimate social support for young men (Kadushin et al., 1981). When the scores from a demoralization scale and the current stress reaction scale were compared, married veterans, especially Vietnam veterans, had fewer problems than unmarried men. The Spouse Support Scale was developed to measure both behavioral and affective qualities of the marital relationships. Only married men were included in this part of the study. Kadushin et al. (1981) found that the support married men received from their spouses reduced the level of stress and demoralization that was due to combat. Having a supportive spouse was more helpful for blacks and combat veterans than for others.

For veterans living in large cities, the level of stress reaction was reduced by having many Vietnam veteran friends. Veterans in larger cities probably had veteran friends with more diverse backgrounds. These veterans were able to help each other work through problems more effectively and reduce their current stress levels. Veterans living in small cities with many Vietnam veterans as friends tended to have higher stress levels. This is possibly due to veterans having only friends with similar problems, a pattern

that reinforced each others problems. For veterans in smaller cities it was more helpful to have both veteran and nonveteran friends and for all the friends to know one another. A mixture of friends for veterans in smaller cities was needed to help these veterans work through their problems in the way the mixture of Vietnam veteran friends helped the veteran in larger cities. These findings suggest that family involvement, especially from supportive spouses, and a mixture of Vietnam veteran friends can have a significant effect on stress levels of veterans. However, the specific kind of support that was helpful was not defined.

Since the amount of combat experience does not account for the incidence of PTSD in Vietnam veterans, Frye and Stockton (1982) attempted to determine which preservice, in-service, and postservice variables would statistically discriminate between veterans with and without symptoms of PTSD. The subjects in this study were members of a 1968-1969 class at an Army officer candidate school. Consequently, these subjects were extremely well educated, financially secure, and successful in a variety of professional occupations; had served as commissioned officers; and were older (mean age during service = 23.7 years) than the

majority of combatants during their service in Vietnam. Frye and Stockton (1982) found five variables statistically discriminated between veterans with and without symptoms of PTSD. These were perceived helpfulness of the veteran's family on his return home, the level of combat experience, immediacy of discharge after the war, locus of control, and preservice attitude toward the Vietnam war.

From these results, Frye and Stockton (1982) inferred that educating the returning veteran's wife, family and significant others during the transition process, and formal, planned transition periods could influence the veteran's reactions to the stress of the war. Frye and Stockton also suggested that further research is needed to specify the behaviors in the veteran's family that contribute to the perception of unhelpfulness and helpfulness. In other words, the family's behaviors that the veteran perceives as supportive need to be qualitatively defined.

Escobar et al. (1983) studied 41 Hispanic veterans in the Los Angeles area who were receiving treatment for symptoms of PTSD. The researchers attempted to validate the DSM-III criteria for PTSD and clarify issues on the boundaries of PTSD and its relationship to other psychiatric disorders; validate the linear

relationship between combat exposure and psychiatric impairment; and explore the effect of the level of acculturation and personal social network on the psychiatric morbidity of Hispanic Vietnam veterans receiving treatment for PTSD.

In this study, veterans with heavy combat stress and who met the DSM-III diagnostic criteria for PTSD were assessed through a systematic review of their medical records, the National Institute of Mental Health Diagnostic Interview Schedule (DIS), The Combat Stress Scale, DSM-III PTSD Symptom Check List, the Social Support Questionnaire, and the Acculturation Rating Scale for Mexican-Americans. These veterans were compared to a control group of veterans with no history of mental or physical disorder and a group of veterans with DSM-III diagnosis of schizophrenic disorder. Escobar et al. (1983) found that the veterans in treatment for PTSD reported very high levels of all the symptoms for PTSD in DSM-III. From the review of medical records, a high frequency of substance use disorders and affective disorders were found as well as personality disorders and violent and suicidal behaviors. The DIS yielded more diagnoses than the review of medical records with the average number of definite axis I diagnoses being more than 3.5

per veteran. Escobar et al. (1983) stated that the study findings lend credence to the existence of Vietnam-linked PTSD but not as a discrete entity. Rather it is enmeshed into symptom clusters that cross various psychiatric diagnoses.

Veterans with more symptoms of PTSD reported smaller social networks and fewer contacts with friends outside the close family circle than veterans with fewer symptoms of PTSD. The veterans who were less acculturated appeared more impaired than veterans who were better acculturated. The researchers stated that a striking feature of the veterans' social network was the high degree of negative emotionality directed at close family members such as spouses. They proposed that this may reflect deeply rooted feelings of guilt and anger from the veterans' Vietnam experiences. This guilt and anger may be intensified by the social, financial and psychological problems that stem from the veterans' difficulties readjusting to civilian life. The researchers also stated that their sample was too small and too homogenous to permit a definitive understanding of the relationships among social networks, acculturation, and psychiatric impairment. The veterans' social network was measured quantitatively and did not address the quality of

social support available to the veteran.

Conceptual Framework

Stress.

The emotional and social difficulties experienced by Vietnam veterans have been linked to the traumatic stressors of the Vietnam war. This is congruent with current literature on life stress. Sarason (1979) conceptualized life stress as life changes that are calls to action and evoke stress. Stress occurs within the person and involves appraisals of situations or tasks confronting the person and the person's ability to deal with them successfully. The appraisals are part of the psychological environment created by people through their cognitions. All cognitions involve information-processing. Stressful cognitions are particularly affected by the need to act, the importance of the outcome to the individual, the availability of a plan of action and uncertainty about the outcome. There are a wide variety of individual differences in the frequency and the degree of preoccupation involved in stress related cognitions. Task-orientation that focuses the person's attention on the task instead of emotional reactions is the most adaptive response to stress. In other words, the person is able to temporarily set aside strong emotions

and deal with the problem (Sarason, 1979).

Stress occurs when the person perceives his/her capabilities as falling short of the personal resources needed to handle the call to action (Sarason, 1979). The person then reacts to this difference between what is required and the perceived resources with non-productive worry instead of task-related activity. The difference between the requirements and the personal resources depends on characteristics of both the person and the situation. Thus there is an interaction effect involving the individual differences of the person and situational factors. Sarason (1979) stated there are at least five factors involved in this interaction. These are the nature of the task, the skills available for performing the task, personality characteristics (dispositions to appraise the task in certain ways or to respond in a self-preoccupying manner), social supports, and the person's history of stress-arousing experiences. The person's current behavior is affected by both recent and past stress-arousing experiences including stress in early life. If the person is able to learn effective coping responses, he/she will be more likely to remain task oriented with current stressors. Therefore, calls to action and stress can be desirable and not necessarily

avoided (Sarason, 1979).

The interaction of the person's skills and personality characteristics and the nature of the situation also have a cumulative effect on the person's coping response according to Sarason (1979). The number of stressors the person has recently dealt with affects his/her ability to cope. Situations also vary in their social desirability, the amount of change they require, and the personal meaning attached. High levels of change within a relatively short period of a person's life are associated with negative outcome (Sarason, 1979). These negative outcomes include psychiatric disorders (Paykel, 1974).

Sarason (1979) stated that research on single situations such as natural disasters, military combat and imprisonment in a concentration camp can enhance knowledge on the phenomenology of stress. These situations involve both danger and uncertainty of outcome. These situations are radically different from the normal range of human experience and require enormous readjustments by the victims of those traumatic experiences. Lifton and Olson (1976) reported that survivors of the Buffalo Creek Disaster had all or some of the following problems: death anxiety and a "death imprint", terrifying dreams,

survival guilt, psychological numbing, impaired social relationships, and a compelling need to search for meaning in the disaster. Though 80% of the survivors had severe psychological maladjustments, these maladjustments usually were not related to pre-existing personality characteristics. Successful readjustment was correlated to the person's ability to remain task-oriented under pressure.

Similar reports by Frankl (1962) stated that survivors of concentration camps had a task-orientation, planfulness, independence, and the ability to objectively and accurately assess a complex situation. These survivors were able to inhibit impulses to complain, rebel or express anger, and use fantasies as solace and distraction. Concentration camp survivors benefited substantially from having something for which to live. Physical and psychological health was aided by the maintenance of self esteem, a sense of human dignity and group belonging, and the belief that he/she was being useful. Additionally, long term follow-up studies of concentration camp survivors found those survivors had a high incidence of personal maladjustment that frequently involved self-preoccupations. Therefore, Sarason (1979) believed that short-lived extreme stress

may cause subsequent self-preoccupation or maladaptation to life.

Sarason (1979) believed crises occur throughout the course of personal development. These crises can be resolved adaptively or maladaptively. When significant life events occur at specific points in a person's life, they may be especially severe or longlasting. Delayed effects of this stress occur even after the person appears to have resolved the stress.

Sarason stated that the person's risk of mental health problems can be reduced if the person has many social bonds or a few strong social bonds. Self-reliance and reliance on others are complementary to one another. In other words, people who receive support from others become more self-reliant and the self-reliant person is more capable of asking others for assistance. Social support provides both a preventative and a therapeutic effect. Persons with fewer social supports, particularly within the family, may have more maladaptive ways of coping.

Social Support.

The concept of social support is a psychosocial variable that has generated much interest in recent literature (Sarason, 1979; Kahn, 1979; Kahn & Antonucci, 1980; Cassel, 1974; Caplan, 1974; Cobb,

1976; Holahan & Moos, 1981; Weiss, 1974; Brandt & Weinert, 1981). Research in a broad range of health related areas suggests that social support may buffer the impact of life stress. Thoits (1982) stated that most research on the buffering effect of social support should be interpreted with caution because of the inadequate conceptualization and operationalization of social support. The measures of social support and of life events is confounded in studies. If Thoits' criticism is valid, an adequate conceptualization and operationalization of social support is needed to guide research.

Weiss (1974) defined social support as the provisions or supplies a person gains through relationships with other people. Weiss believed that relationships with others become specialized in the type of provisions they provide. People need a number of different relationships to develop the conditions necessary for well-being. When studying the members of Parents Without Partners, Weiss found these people experienced "the loneliness of emotional isolation" from the lack of intense emotional contact provided by their partners. Weiss also discovered that wives of couples who had recently moved to the Boston area from at least two states away experienced "the loneliness of

social isolation" because they lacked social activity. Weiss concluded that provisions of marriage cannot be met by friendship and the provisions of friendship cannot be met by marriage. Different relationships provide different kinds of support.

Weiss (1974) identified six provisions of support, each typically associated with a particular type of relationship. Each provision requires a relationship that is based on different assumptions than those of other relationships. The six categories of provisions are attachment, social integration, opportunity for nurturance, reassurance of worth, a sense of reliable alliance and the obtaining of guidance.

Attachment-providing relationships give the person a sense of security and place. The person feels comfortable and at home in these relationships and lonely and restless without them. Relationships that provide attachment include marriage, committed cross-sex relationships; a close friend, sister or mother for women; and "buddies" for men. The attachment-providing relationships may not be as specialized as other relationships.

Relationships in which the participants share social concerns provide social integration. Social integration is provided more effectively if the person

has a network of these relationships with a common concern. This allows the development of pooled information and ideas and a shared interpretation of experience. These relationships also provide a source of companionship, opportunities for exchange of services, and a base for social events and activity. Without social integration, life can become painfully dull.

Relationships that provide the opportunity for nurturance occur when an adult takes responsibility for the well-being of a child and develops a sense of being needed. This gives the person meaning in his/her life and sustains the person's commitment to a wide variety of goals. Thus, people without opportunity to associate with children may lack a reason for living provided by the opportunity for nurturance experienced by people with children.

Reassurance of worth is found in relationships that make the person feel competent in social roles. Weiss (1974) found that men and women who work find this in colleague relationships, especially if the work is difficult or highly valued. Relationships within the family and from friends provide reassurance of worth for people whose job skills are not valued and for those who stay at home.

Kin relationships provide a sense of reliable alliance. Weiss (1974) believed that only kin relationships, especially between siblings and lineal kin, can be expected to continue regardless of whether there is mutual affection or reciprocation for past help. People without familial relationships may feel constantly limited in their own resources, or vulnerable and abandoned.

The ability to obtain guidance is especially important to people in stressful situations. When stressed, the person needs a relationship with an apparently trustworthy and authoritative person who can provide emotional support and assistance in developing and sustaining a plan of action.

Weiss (1974) believed that an adequate life organization contains sets of relationships that furnish all of these provisions. However, these provisions may not be of equal importance to all people. During a person's life the value of the relational provisions changes according to the phase of life, interest, or even personality traits. A sense of almost constant accessibility of attachment relationships is required. This attachment may be provided by a central person, and other relationships may be organized around that person. Different life

organizations provide better flexibility, growth, stability or buffering from losses for some people than others. Weiss (1974) believed that a person will experience distress if a required relational provision is absent. Each provisional deficit has a specific form of distress. Although the form and severity of the distress differ, Weiss (1974) stated that a condition of restless distress is created by any deficit. These relational provisions affect the person's ability to handle stressful situations. This conceptualization of social support is useful for understanding the effect of the stress of the Vietnam war on its veterans.

The Relationships Among the Problems of Vietnam Veterans, Stress and Social Support

The problems of Vietnam veterans, stress and social support are difficult to separate operationally. Therefore, Sarason's ideas about stress and social support (Sarason, 1979) will be discussed in relation to the problems of Vietnam veterans. Then Weiss' conceptualization of social support (Weiss, 1974) and the effect of the stress experienced by Vietnam veterans will be described.

Sarason's view of stress as the appraisal of the situation and the person's ability to deal with the

situation is congruent with research that found not all veterans with similar experiences had difficulty readjusting to civilian life. Also the effect of individual differences and resources can be seen in the fact that Blacks and Chicanos experienced more stress (Kadushin et al., 1981) while veterans with supportive families (Frye & Stockton, 1982) and a mixture of veterans as friends have less stress (Kadushin et al., 1981). In addition to this interaction, the cumulative effect of the stressors of combat, homecoming experiences and the sociopolitical climate is also reported (Goodwin, 1980). The cumulative effect of the increased number of stressors may be demonstrated by the fact that veterans who were in heavy combat were more stressed (Egendorf et al., 1981). However, Sarason (1979) believed that a single traumatic situation involving danger, uncertainty of outcome, and requiring enormous amounts of readjustment can produce self-preoccupation or maladaptation to life. Thus, the severity of the stress of combat without the cumulative effect can cause either immediate or delayed symptoms of stress such as those seen in Vietnam veterans. Sarason (1979) believed that responses to crises at specific points during personal development may be severe and longlasting. This is consistent with

Wilson's (1978) view that the typical Vietnam veteran was unable to successfully complete the normative development of identity formation. Sarason's (1979) concept of social support as a buffer is congruent with research showing the buffering effect of supportive spouses of Vietnam veterans (Kadushin et al., 1981). The conceptualization of stress and the effect of social support can be used to describe the current delayed stress symptoms seen in Vietnam veterans.

Weiss' (1974) belief that different relationships are needed to provide six categories of provisions can be used to describe the type of social support that benefitted veterans with less current stress. Vietnam veterans were separated from their families and friends who had provided support causing deficits in their social support. The relationships formed during combat were based on survival and a single common purpose. Therefore, many of the provisions of support that were typical in the veteran's life were lacking. Vietnam veterans' distrust and detachment from America and its institutions (Lipkin et al., 1981), may reflect the veterans' inability to obtain guidance from the trustworthy figure they had expected to find through government policies and military strategies. For example, the veteran felt helpless when there was not a

unified effort to win the war, especially after the Tet offensive in 1968, which resulted in veterans who served after Tet being more stressed than those who served before. Also, when veterans returned home, they found some of the relationships, e.g., family, friends, and the VA, did not provide the support the veteran had expected (Lipkin et al., 1982). Weiss' belief that people's need for almost constant accessibility to attachment relationships may explain the positive effect of supportive families (Frye & Stockton, 1982) and supportive spouses (Egendorf et al., 1981). According to Weiss, the organization of provisional relationships vary over a person's life; therefore, the provisions in the Vietnam veterans' current relationships need to be explored.

Summary

Nearly a decade after the Vietnam war ended, Vietnam veterans continue to have more difficulty adjusting than their peers. The unique characteristics of that war have profoundly effected the veterans. Although many veterans' symptoms meet the diagnostic criteria for PTSD in DSM-III, these criteria are not broad enough to include the sub-clinical malaise manifested by substance abuse, vocational difficulties, interpersonal problems and mood problems that veterans

experience. One of the factors effecting the degree of adjustment of veterans is the social support provided by spouses, family, and friends who are Vietnam veterans. The provisions of support provided by these relationships have not been described in the literature.

Statement of Problem

The literature indicates that Vietnam veterans have more adjustment problems than their peers who were not in the military or did not serve in Vietnam. These problems include less education, lower status jobs, greater use of alcohol and drugs, higher rates of arrest, and a higher incidence of medical and psychological complaints. Some of these problems are commensurate with PTSD defined in DSM-III. Prior research established that veterans who had fewer adjustment problems received positive support from their families, especially spouses. No research is reported that describes the support provided in the veterans' relationships. The buffering effects of social support have been explored in relation to other life stresses and health-related problems.

Treatment of Vietnam veterans with symptoms of delayed stress includes broadening and strengthening their social support network (Berman et al., 1982;

Lipkin et al, 1982). However, there is insufficient knowledge about social support to guide clinical practice (Norbeck, 1981). Therefore, information is needed about the relationships that Vietnam veterans perceive as sources, the provisions of support provided by those relationships, and the effect of that support on the veterans' stress level before intervention studies can be conducted.

The following terms are used in this study:

Vietnam veteran, social support, and stress reactions. A Vietnam veteran was defined in this study as any veteran with military service in Southeast Asia during the period of the Vietnam war (1963 or before to 1973) and who has sought counseling for symptoms of delayed stress from the Vet Center in a metropolitan Northwestern city. This study used Brandt and Weinert's (1981) definition of social support. This definition is a synthesis of several concepts of social support with a strong emphasis on Weiss' (1974) conceptualization. Brandt and Weinert (1981) included all of Weiss' provisions except for the provision of a sense of reliable alliance obtained from kin ties. Thus, social support is defined as the provisions of worth, social integration, intimacy, nurturance and assistance provided by sources in the veterans'

relationships with other people. Stress reactions are defined as those behaviors that reflect difficulties in the veterans' psychological, interpersonal and vocational adjustment.

Research Questions and Hypotheses

The questions that this study addressed are:

1. What are the relationships between the support provisions of worth, social integration, intimacy, nurturance, assistance and the total support provided as measured by the Personal Resource Questionnaire and the level of Vietnam veterans' current stress reactions as measured by the Vietnam Stress Scale?
2. What sources of support are most commonly indicated by the veterans in this study as measured by the Personal Resource Questionnaire Part 1?
3. What are the relationships between the veterans' dissatisfaction with these sources as measured by the Personal Resource Questionnaire and the level of Vietnam veterans' current delayed stress reactions as measured by the delayed stress items on the Vietnam Stress Scale?

Based on the previous review of literature, the following hypotheses are formulated for question one:

1. There will be a negative relationship between the support provision of nurturance as measured by the

Personal Resource Questionnaire and the delayed stress reaction level of Vietnam veterans as measured by the Vietnam Stress Scale.

2. There will be a negative relationship between the support provision of intimacy as measured by the Personal Resource Questionnaire and the delayed stress reaction level of Vietnam veterans as measured by the Vietnam Stress Scale.

3. There will be a negative relationship between the support provision of social integration as measured by the Personal Resource Questionnaire and the delayed stress reaction level of Vietnam veterans as measured by the Vietnam Stress Scale

4. There will be a negative relationship between the support provision of worth as measured by the Personal Resource Questionnaire and the delayed stress reaction level of Vietnam veterans as measured by the Vietnam Stress Scale.

5. There will be a negative relationship between the support provision of assistance as measured by the Personal Resource Questionnaire and the delayed stress reaction level of Vietnam veterans as measured by the Vietnam Stress Scale.

6. There will be a negative relationship between total support as measured by the summed score of the

provisions of worth, social integration, intimacy, nurturance and assistance on the Personal Resource Questionnaire and the stress reaction level of Vietnam veterans as measured by the Vietnam Stress Scale.

No hypotheses were formulated for question two.

The following hypothesis was formulated for question three:

1. There will be a positive relationship between dissatisfaction as measured by the Personal Resource Questionnaire and delayed stress reaction level as measured by the Vietnam Stress Scale.

Chapter III

Methods

The present study is descriptive and correlational in nature because there is no previous research that describes the relationships among the provisions and resources of social support with delayed stress reactions in Vietnam veterans. Without this descriptive and correlational information, prescriptive research cannot be conducted (Polit & Hungler, 1983). Social support is treated as the independent variable and delayed stress as the dependent variable.

Subjects and Setting

This study was conducted in the Vet Center of a Northwestern city. Permission for this study was granted by the Vet Center (see Appendix A). This Vet Center is one of approximately 140 centers that form a nationwide network to provide readjustment counseling for Vietnam veterans. These centers provide individual, group, and family counseling, and assistance with problems in employment, education and VA benefits to any Vietnam era veteran who has readjustment problems.

A convenience sample of 48 veterans who came to the Vet Center for an intake interview between August 30, 1984 and January 28, 1985 was obtained. All Vet

Center clients who met the following criteria were invited to participate:

1. served in the armed forces in Southeast Asia from 1963 or before to 1973.
2. completed one intake meeting with a Vet Center staff member.
3. began counseling for readjustment difficulties at the Vet Center.

The characteristics of this sample were described by the demographic data obtained by the Vietnam Stress Scale. The number of combat experiences were used to describe the extent of combat exposure of the sample while in Southeast Asia. These data were collected because those veterans with heavy combat exposure and those who served after 1967 were likely to be more stressed at the time of the survey. Subjects' employment stability was described by the number of hours a week the veteran worked in the last month and the longest period of employment at the same job. These data are important because they indicate the veterans' employment and vocational problems.

Instruments

Vietnam Stress Scale.

The Vietnam Stress Scale (see Appendix B) was developed by Collier and Drummond (D. Collier, personal

communication, March 6, 1984) to evaluate treatment outcomes as part of an ongoing study at the Vet Center. The Vietnam Stress Scale consists of items about delayed stress symptoms, variables related to delayed stress in Vietnam veterans and treatment evaluation. The delayed stress items were derived from the diagnostic criteria for PTSD found in DSM-III and from symptoms described in the literature about Vietnam veterans. The Combat Index developed by Egendorf et al. (1981), and The Impact of Events Scale introduced by Horowitz, Wilner, and Alvarez (Zilberg, Weiss, & Horowitz, 1982) was incorporated into the Vietnam Stress Scale. The remainder of the items were derived from the literature about Vietnam veterans.

The Vietnam Stress Scale is a self report questionnaire consisting of 88 items. Table 1 portrays information related to the scale items. The first section includes sociodemographic/background items. The next section consists of 49 five-point Likert scale items that assess symptoms of delayed stress that have occurred at any time of the veterans' life. The following section is the Impact of Events Scale (Zilberg et. al., 1982). The next two questions evaluate the frequency of alcohol and drug use. Next, combat involvement was determined by the Combat Scale

Table 1
Vietnam Stress Scale

Variable	Number of Items	Scaling	Type of Data	Range of Scores
Age	1	open	Interval	25-50
Sex	1	dichotomous	Nominal	0-1
Branch of Service	1	multiple choice	Nominal	0-3
Date of service	1	multiple choice	Ordinal	0-3
Main job in S.E. Asia*	1	write-in	Descriptive	--
Hours employed/ week	1	open	Interval	0-99
Longest period of employment	1	open	Interval	0-999
Delayed Stress Symptoms	49	5-point Likert	Interval	0-4
Impact of Events*	15	4-point Likert	Interval	0-3
Drug and Alcohol use*	2	5-point Likert	Interval	1-5
Combat Scale	6 4	dichotomous	Nominal	0-1 0-2
Effect of Vietnam*	1	dichotomous & write-in	Nominal & Descriptive	0-1
Treatment evaluation*	5	6-point Likert &	Interval	1-6
	1	dichotomous	Nominal	0-1

Note. * = Items not included in the study.

(Egendorf et al., 1981) which is a checklist with the last four items weighted to be twice the value of the first six items. Next is an item about the veterans' perception of the effect of Vietnam on his life. The last five items on the Vietnam Stress Scale regard the veterans' satisfaction with the Vet Center. This instrument took approximately ten minutes to complete.

The items used in this study were the sociodemographic/background except the main job in Vietnam, the delayed stress items and the Combat Scale. The items regarding the veterans' main job in Vietnam, alcohol and drug use, the veterans' perception of the effect of Vietnam, and the veterans' satisfaction with the Vet Center were not included in this study because they were not directly related to a research question and did not contribute to the description of the sample. As part of this present study, Pearson correlation coefficient analysis was performed between the delayed stress items on the Vietnam Stress Scale and the Impact of Events Scale. Since there was a high correlation between the delayed stress items and the Impact of Events Scale items ($r = .71$, $p \leq .001$), only the delayed stress items are reported in this study.

The internal consistency of the Combat Scale, developed to measure the extent of veterans' exposure

to combat, had been previously established (Cronbach's alpha equaled .84) (Egendorf et al., 1981). In the initial stages of testing and refinement of the Vietnam Stress Scale, the reliability coefficients on the original instrument which consisted of 37 items ranged from .59 to .88 for the factors produced from a varimax rotation. As a result, the instrument was revised to include 49 items. (D. Collier, personal communication, March 4, 1985).

Personal Resource Questionnaire.

The Personal Resource Questionnaire (PRQ, Appendix C) was developed by Brandt and Weinert (1981) to measure the multidimensional characteristics of social support. These characteristics include five provisions of support, the person's sources for support and the person's satisfaction with the support received. Permission was obtained for use of instrument (see Appendix A).

This self report has two parts (see Table 2). In the first section of Part 1, the respondent was asked to indicate the sources of support that would be available in eight hypothetical life crises that are described, and in one fill-in crisis situation. The respondent then indicated if the situation had been experienced in the last six months, and if so, the

amount of satisfaction that was felt with the support received. Part 2 of the PRQ is composed of 25 items that are rated on a seven-point Likert scale. There are five items for each of the five provisions of support measured by this instrument. The approximate test completion time is ten minutes (Brandt & Weinert, 1981).

Table 2

Personal Resource Questionnaire

Variable	Number of Items	Scaling	Type of Data	Range of Scores
Part 1				
Source	9	open	Nominal	1-10
Occurrance	9	dichotomous	Nominal	0-1
Dissatisfaction	9	6-point Likert	Interval	1-6
Part 2				
Worth	5	7-point Likert	Interval	1-7
Social Integration	5	7-point Likert	Interval	1-7
Intimacy	5	7-point Likert	Interval	1-7
Nurturance	5	7-point Likert	Interval	1-7
Assistance	5	7-point Likert	Interval	1-7

Normative data for the instrument were collected in 2 phases. During the first phase, 149 spouses of multiple sclerosis victims were sampled. To test for predictive validity, PRQ scores were compared to family functioning and dyadic satisfaction and consensus, and modest correlations ($\underline{r} = .21$ to $.44$ range) were found. Construct validity was measured by comparing Self Help Ideology developed at Harvard University to the PRQ. The only provisions that were significantly correlated to the Self Help Ideology were intimacy, assistance and social integration.

Reliability has been established for the instrument by examining its internal consistency. Cronbach alpha equaled $.89$ for PRQ - Part 2. The intercorrelation of subscales of provisions of support ranged from $\underline{r} = .58$ to $\underline{r} = .62$ ($\underline{p} \leq .001$) for intimacy, social integration, worth, and assistance, and $\underline{r} = .26$ to $\underline{r} = .38$ ($\underline{p} \leq .001$) for nurturance. Since the nurturance subscale has a lower correlation to the other subscales and an internal consistency of Cronbach's alpha equaled $.77$, Weinert (1982) believes the low correlation indicates that nurturance is an independent dimension while the other 4 subscales have some overlap. Test-retest reliability was not measured in the first phase of testing (Brandt & Weinert, 1981).

During the second phase of reliability and validity testing, four populations were sampled. These were elderly, low income mothers, prenatal couples, and marital partners of multiple sclerosis victims. The mean scores of the four groups were compared and tested for the significance of differences between the scores. Social desirability as a response bias was ruled out by using the Marlowe - Crowne Social Desirability Scale ($\underline{r} = -.06$, n.s.). When the demographic data were compared between groups there were no differences by sex. The older aged people reported lower levels of perceived support and the better educated people perceived themselves as having more support. To measure construct validity, the PRQ was compared to the Zung Depression Scale, the State-Trait Anxiety Scale and the Profile of Moods State (POMS) by calculating Pearson's product moment correlations. The results are as follows: Zung Depression Scale $\underline{r} = -.20 - -.42$, State Anxiety $\underline{r} = -.37 - -.42$, Trait Anxiety $\underline{r} = -.22 - -.47$, and POMS $\underline{r} = -.10 - -.46$. All of the correlations were negative in the low to moderate range, supporting Weinert's assumption that social support is not the same theoretical construct as anxiety or depression. Internal consistency coefficients were also calculated for phase two testing

but test-retest reliability was not done (Weinert, 1982).

Procedure

Two psychometric instruments, the Vietnam Stress Scale and the PRQ, were administered at the end of the veterans' intake meeting with a Vet Center staff member. The questionnaires were administered at this time to reduce the confounding effect that treatment in the Vet Center may have on the social support available to the veteran. The questionnaires were administered by four staff members who conduct the intake meeting. Initially, two staff members were oriented to the study by the investigator. During the data collection period, two other Vet center workers also administered the questionnaires and were oriented by one of the original staff members. Data collection occurred by standard self-report instruments. Therefore, no threat to internal validity appeared to have occurred. The Vietnam Stress Scale was part of an ongoing study conducted at the Vet Center and participants were asked to complete it before signing the consent form for this study and before completing the PRQ.

The data from the PRQ and selected sociodemographic information of the participants, without identifying information, were submitted to Dr.

Clarann Weinert at Montana State University to contribute to the pooled analysis of normative data on the PRQ. The data from the Vietnam Stress Scale and the PRQ were maintained in a locked filing cabinet in the Vet Center.

Anonymity of the subjects was ensured by only using code numbers on the survey instruments and by maintaining a master code book that indentified these subjects in a separate locked filing cabinet. Subject consent for collection of these data was obtained by this investigator (see Appendix D).

Analysis of Data

Study data were analyzed using Pearson's product moment correlations to examine the relationships between the independent and dependent variables for each of the hypotheses previously stated for research question one and research question three. In addition, Pearson's product moment correlations were calculated between the number of sources of social support and delayed stress symptoms for research question two. Frequencies were computed for the nominal demographic data and for each source of support indicated by the veterans (research question two). Cronbach's alpha was calculated to examine the internal consistency reliability of the subscales and total provisions of

support. Pearson's correlation coefficients were calculated between the delayed stress items and the Impact of Event Scale. The error probability of equal to or less than 0.05 was used to indicate statistical significance in all analyses. The data were analyzed by using the Statistical Package for Social Science computer program.

Chapter IV

Results

In this chapter the results of the study are described in the following order: first the characteristics of the sample, next the findings that relate to each research question, and finally additional findings not related to a specific research question.

Characteristics of the Sample

Forty-eight male Vietnam veterans participated in this study. In the design of this study, every veteran who met the selection criteria was to have been invited to participate. However, because some of the intake interviewers did not have access to the research instruments all of the time, 57 of the 78 eligible veterans were invited to participate. Two veterans refused, 48 completed both questionnaires and 7 had incomplete data sets because only one instrument was completed.

The veterans' ages ranged from 33 to 45 years, with a mean age of 37 years. All of the subjects were male. The branch of service identified were Army $n = 26$ (55.3%), Navy $n = 7$ (14.9%), and Marine Corps $n = 14$ (29.8%). None of the respondents in this sample served in the Air Force. Subjects reported that they

had served varying amounts of time between 1967 and 1969 more frequently than during other years of combat in Southeast Asia, as portrayed in Figure 1.

Delayed Stress Reactions and Social Support

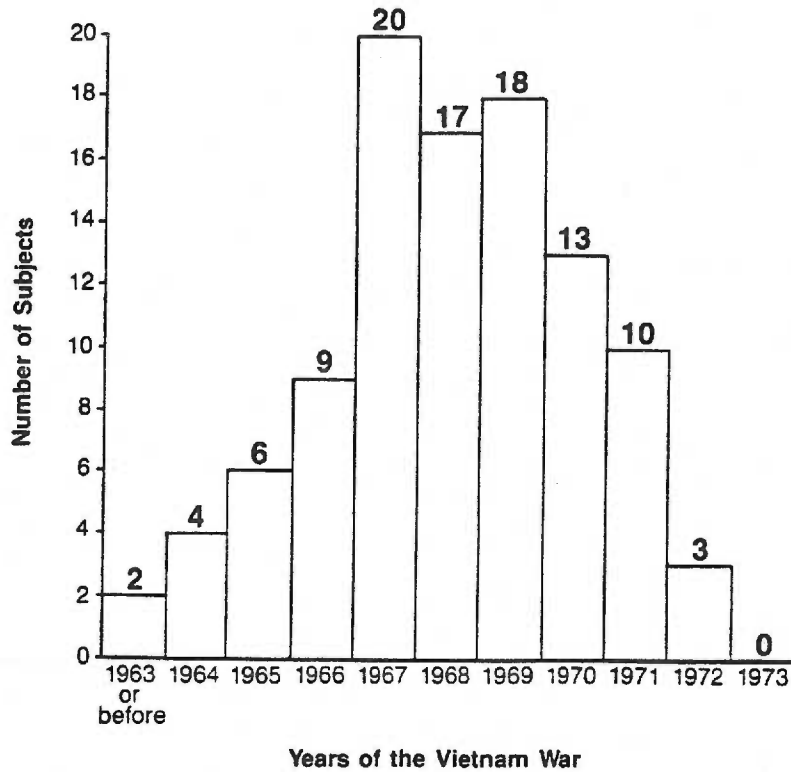


Figure 1.
Number of Subjects Who Served by Year
(Subjects may have served one or more years).

One of the indicators of a subclinical malaise associated with PTSD is vocational difficulties. Lipkin et al. (1982) reported that Vietnam veterans tended to have unstable work histories. To compare the job stability of this sample to previously described

samples, data were collected regarding the hours worked in the last week and the longest period of post-service employment. Twenty-four veterans (53%) reported that they were unemployed. Of those employed, 16 (76%) worked full-time. In other words, approximately one-third of this sample worked thirty-seven hours or more in the last week. For the question regarding the longest period of employment, two veterans stated that they had not had a job since their military service. The respondents who had been employed reported periods of employment ranging from 4 months to 20 years with a mean of 5.1 years.

The mean of the stress reaction scores was 115.42 (sd = 32.25) with a range of 50 to 174. The mean stress reaction per item was 2.36 (sd = .66). Veterans with more combat experience have a higher risk for developing symptoms of delayed stress (Egendorf et al., 1981). Therefore, veterans' combat experience was evaluated with the Combat Scale. Out of a possible 14 points, veterans in this sample ($n = 44$) reported a range of 2 to 14 points with a mean of 9.5 and a mode of 12.

To assess the representativeness of study subjects, the sample was compared to the sample of veterans at the Vet Center who completed the original

Vietnam Stress Scale. The original Vietnam Stress Scale was administered to 89 veterans who came to the Vet Center for an intake interview between March 1 and August 29, 1984. Comparison data consisted of age, branch of service (Army, Navy, Air Force, and Marine Corps), years served in Vietnam (1963 or before, 1964-1966, 1967-1969, 1970-1973), number hours employed (unemployed, partially employed and employed full-time), and number of years veterans were employed since the military. Student's t tests were calculated to determine if significant differences existed between the two samples on age and number of years employed since the military. Chi square was used to compare categorical demographic variables.

The comparisons of the two samples of veterans from the Vet Center are presented in Table 3. The data analysis on the study using the original Vietnam Stress Scale did not include a range of scores on the Combat Scale and a mean and standard deviation for the stress reaction level. A proxy mean and a standard deviation were calculated for the stress reaction level by averaging the means and standard deviations on the 37 delayed stress items. No significant differences were found between the samples except on branch of service and the number of hours the veterans had worked in the

week before their intake interview ($p \leq .001$).

Table 3

Characteristics of the Sample and Tests of Significance of Differences with Comparison Group

Variable	Current Sample			Comparison Group			Significance Test
	m	sd	Range	m	sd	Range	t-test
Age	37.00(2.77)		33-45(n=47)	35.43(3.08)		28-48(n=88)	n.s.
Sex	Male=100%			Male=100%			n.s.
Longest Employment	61.27(55.1)		0-240(n=43)	56.46(51.6)		1-240(n=87)	n.s.
Stress Reaction Level (Per Item)	2.36(0.66)		0-4(n=48)	2.31(1.24)		0-4(n=87)	n.s.
Combat Scale	9.48(3.64)		2-14(n=44)	8.58(3.81)		—(n=85)	n.s.

Variable	Frequency	%	Frequency	%	Chi Square
Branch of Service					
Army	26	55.3	36	62.9	20.85(3), $p < .001$
Navy	7	14.9	11	12.4	
Air Force	0	0.0	1	1.1	
Marine Corps	14	29.8	21	23.6	
Date in Service					
1963 or before	2	2.2	2	2.3	4.29(3), n.s.
1964-1966	19	20.7	19	21.6	
1967-1969	55	59.8	49	55.7	
1970-1973	26	28.3	18	20.5	
Hours Worked Last Week					
Unemployed	24	53	39	44	22.08(2), $p < .001$
Part-time	5	11	16	18	
Full-time	16	36	33	38	

Note. n.s. = Nonsignificant

The data for this study were collected approximately one year after the data were collected for the original Vietnam Stress Scale. Logically, a difference could have occurred between the samples for age and the number of months veterans were employed

since their military service because of maturation of veterans. However, maturation of veterans over time between the two samples did not appear to have a significant effect on these variables. The significant difference in the branch of service and the number of hours worked in the last week may be related to the small cell size for some of the categories (Polit & Hungler, 1983). However, since the frequencies for these variables have the same rank order in both studies, the subjects in the present study were judged to represent veterans served by the Vet Center.

Research Questions

The findings related to each of the three research questions about the relationships between social support and the stress reaction level will now be reported.

Research Question One.

Research question one asked what are the relationships between the five social support provisions, including the total of these provisions of support, and the stress reaction level. Findings are portrayed in Table 4. All the provisions of support were negatively correlated with the stress reaction level at a significance level of at least $p = .05$. The highest correlation was between the total support

score and the stress reaction level. In other words, those veterans who perceived the fewest provisions of support had higher stress reaction levels. Therefore, the six hypotheses associated with question one were

Table 4

Correlations Between the Mean Frequency of the Provisions of Support and Delayed Stress Reaction Level

Provision	Mean	Correlations with Delayed Stress Reaction Level	
		Pearson r	p
Nurturance	4.75	-0.251	.05
Intimacy	3.97	-0.405	.002
Social Integration	3.85	-0.320	.01
Worth	3.95	-0.464	.001
Guidance	4.24	-0.286	.03
Total	3.91	-0.534	.000

Research Question Two.

The second research question asked what sources of support are most commonly indicated by veterans. The support sources were requested for nine situations, eight of which were hypothetical and one was a real subject-identified situation. The veteran was asked to

indicate all of the sources of support (e.g, parent, spouse, friend) to whom he would turn for aid in each situation. The frequency with which each source was indicated for each of the nine situations was calculated (see Appendix E). The mean frequency of these sources across all situations were derived and are portrayed in rank order in Table 5. The source of support most frequently identified across all nine situations by the veterans in this sample was spouse ($m = 0.45$). In other words, for all veterans in all situations, spouse would provide support 45% of the time. The least frequently indicated source of support, former spouses, would be turned to 1% of the time.

Pearson product moment correlations were calculated between the stress reaction level and the mean frequency of source of support by each veteran over all nine situations. Most of these correlations were negative as illustrated in Table 5. There is a significant positive correlation between the stress reaction levels and the "no one available" category and a significant negative correlation between the total number of sources of support and delayed stress. In other words, veterans with no one to turn to for support tended to have more symptoms of delayed stress

Table 5

Rank Order of Sources of Support Across All Nine Situations
and Correlation with Delayed Stress Reaction Level

Source	Frequency of Source of Support Across All Situations		Correlation With Delayed Stress Reaction Level
	mean	(sd)	Pearson <u>r</u>
Total Number of Persons Listed	1.95	(0.89)	-0.428**
Spouse	0.45	(0.34)	-0.340**
Friend/Neighbor/ Coworker	0.24	(0.25)	-0.328**
Professional	0.24	(0.27)	-0.377**
Parent	0.23	(0.28)	0.110
Prefer to Handle Alone	0.20	(0.29)	0.127
Self-help Group/ Agency	0.16	(0.21)	-0.231
Relative	0.14	(0.23)	-0.183
Spiritual Advisor	0.09	(0.19)	-0.549***
No One Available	0.08	(0.17)	0.238*
Child	0.03	(0.07)	-0.138
Former Spouse	0.01	(0.04)	-0.027
Other	0.005	(0.02)	0.089

*p \leq .05. **p \leq .01. ***p \leq .001.

as measured by the stress reaction level, and those veterans with more sources of support had fewer symptoms of delayed stress.

On the PRQ, the first 8 situations are hypothetical and the ninth is a write-in situation that the respondent describes. As would be expected, not every subject had experienced all situations.

Forty-three subjects indicated that situation 8 ("Have you been upset and frustrated with the conditions of your life in the past six months?") had occurred. For situation 9, 38 veterans described their greatest concern or problem for the write-in situation.

Thirty-seven veterans indicated that they had experienced situation 3 ("Have you been concerned about your relationship with your spouse, partner, or intimate other in the past six months?"). Therefore, the frequency of the sources of support for these three situations were calculated and t -tests were used to compare the delayed stress reaction levels veterans who cited each of these categories of support and those who did not cite these categories of support.

There was a similar pattern in the frequency of the responses (See Table 6). The three sources most frequently indicated across all nine situations and for situations 3 and 9 were spouse, friend/neighbor/

Table 6

Frequencies of Sources of Support on Situations 3, 8, and 9 on the PRO

Source	Situation 3			Situation 8			Situation 9		
	n	m	sd	n	m	sd	n	m	sd
Parent	6	0.14	(0.35)	6	0.13	(0.33)	6	0.13	(0.34)
Child	1	0.02	(0.15)	0	0.0	(0.00)	1	0.02	(0.15)
Spouse	12	0.27	(0.45)	21	0.44	(0.50)	22	0.47	(0.50)
Former Spouse	2	0.05	(0.21)	0	0.0	(0.00)	0	0.0	(0.00)
Relative	4	0.09	(0.29)	7	0.15	(0.36)	4	0.09	(0.28)
Friend/Neighbor/ Coworker	12	0.27	(0.45)	12	0.25	(0.44)	15	0.32	(0.47)
Spiritual Advisor	4	0.09	(0.29)	5	0.10	(0.31)	5	0.11	(0.31)
Professional	17	0.39	(0.49)	16	0.33	(0.48)	18	0.38	(0.49)
Self-help Group/ Agency	8	0.18	(0.39)	15	0.31	(0.47)	13	0.28	(0.45)
No One Available	6	0.14	(0.35)	2	0.04	(0.20)	3	0.06	(0.25)
Prefer to Handle Alone	8	0.18	(0.39)	13	0.27	(0.45)	7	0.15	(0.36)
Other	0	0.0	(0.00)	0	0.0	(0.00)	0	0.0	(0.00)
Total	66	2.00	(1.09)	82	2.16	(1.13)	74	2.21	(1.32)

Note. Because the subject may cite more than one source of support for each situation, the total number for each situation is greater than the number of subjects in the sample.

coworker, and professional. The exception to this pattern is that subjects indicated that to handle situation 8, they would turn to a self-help group/agency or prefer to handle it alone before they would turn to a friend/neighbor/ coworker. Spouse was the most frequently cited source of support except for

situation 3. Professional source of support is most frequently reported for this situation.

For situation 3, subjects who turned to their spouses and friend/neighbor/coworker had significantly lower stress levels (see Table 7). For situation 8, subjects who turned to spouses and professionals had significantly lower stress levels. Situation 9 is a write-in situation. Therefore, the effect of the source of support on a specific problem are unknown. For this situation, only those subjects who turned to friends/neighbor/coworker had significantly lower stress levels.

Research Question Three.

In research question three, the relationship between veterans' dissatisfaction with their sources of support and their level of delayed stress was examined by use of Pearson's product moment correlations. The degree of satisfaction was rated on a scale of 1 to 6 with 1 being very satisfied and 6 being very dissatisfied. A positive relationship was hypothesized between the degree of dissatisfaction and the stress reaction level.

Of the veterans who reported that any situation had occurred, there was a significant positive relationship between the degree of dissatisfaction with

Table 7

t-test for Situations 3, 8, and 9 with Delayed Stress Reaction Level and the Sources of Support of Spouse, Friend/Neighbor/Coworker, and Professional

	Delayed Stress Reaction Level				<u>t</u>	p
	Source		Source			
	Not cited		cited			
	m	sd	m	sd		
Situation 3 "Have you been concerned about your relationship with your spouse, partner, or intimate other in the past six months?"						
Spouse	2.50	(.62)	1.94	(.61)	2.71	**
Friend/Neighbor/Coworker	2.48	(.58)	1.99	(.76)	2.35	*
Professional	2.47	(.69)	2.15	(.57)	1.65	n.s.
Situation 8 "Have you been upset and frustrated with the conditions of your life in the past six months?"						
Spouse	2.54	(.57)	2.12	(.70)	2.34	*
Friend/Neighbor/Coworker	2.44	(.61)	2.10	(.75)	1.60	n.s.
Professional	2.53	(.61)	2.01	(.63)	2.74	**
Situation 9 "What has been the greatest concern or problems for you in the past six months?"						
Spouse	2.49	(.57)	2.19	(.73)	1.60	n.s.
Friend/Neighbor/Coworker	2.49	(.60)	2.06	(.70)	2.18	*
Professional	2.48	(.67)	2.15	(.59)	1.75	n.s.

Note. All calculations are based on pooled variance.

n.s. = Nonsignificant. *p ≤ .05. **p ≤ .01.

their support sources and the delayed stress reaction level. In other words, veterans with more frequent symptoms of delayed stress were more dissatisfied with their sources of support. Therefore the hypothesis for question three was supported.

Table 8

Average Dissatisfaction With Sources of Support and Correlations
With Delayed Stress Reaction Level Across All Situations and
With Situations 3, 8, and 9

	Number of Situations Experienced Per Veteran		Mean Dissatisfaction		Correlation With Delayed Stress Reaction Level	
	m	sd	m	sd	r	p
Total Across All Situations That Occurred	6.26	(1.42)	3.7	(1.26)	.36	.01

	Number of Veterans that Experienced The Situation	Mean Dissatisfaction		Correlation With Delayed Stress Reaction Level	
		m	sd	r	p
Situation 3	37	4.11	(1.73)	.29	.04
Situation 8	43	4.16	(1.66)	.33	.02
Situation 9	38	4.00	(1.61)	.07	.35

Pearson's correlations were also calculated between the degree of dissatisfaction in situations 3, 8 and 9 and the stress reaction level (see Table 8). Although the mean dissatisfaction score indicates that

veterans are only a little dissatisfied with the support they have received, there is a significant positive relationship between the stress reaction level and the degree of dissatisfaction for situations 3 and 8 as it was for the total across all nine situations.

Additional Findings

In Legacies of Vietnam, Egendorf et al. (1981) found that veterans with more combat exposure tended to have more symptoms of delayed stress. Therefore, Pearson's product moment correlations were calculated between veterans' delayed stress reaction levels and their level of combat exposure. The correlation between the combat experience and the delayed stress reaction level was not significant ($n = 44$, $r = .12$, $p = .2$). This finding may indicate that although this sample is not significantly different from a previous sample from this Vet Center, it is not representative of the samples of Vietnam veterans studied in other research. Also, as cited earlier, Yager et al. (1984) found that the Combat Scale did not elicit the specific type of war trauma, e.g., witnessing or participation in abusive violence, that could identify and explain the psychological problems experienced by Vietnam veterans. Therefore, the findings in the present study may reflect the lack of sensitivity in the Combat

Scale.

Forty-four of the 48 subjects completed the write-in situation, situation 9. Content analysis was performed on the subjects' descriptions of their greatest concern or problem (see Table 9). The responses clustered into the following categories: interpersonal relationship problems, emotional problems, employment problems, financial problems, existential problems, pain/physical problems, other problems and drug/alcohol dependence problems. Some veterans listed more than one problem for a total of 93 problems. The most frequently cited problem, interpersonal relationship problems, was described by over half of the veterans. The next most frequent problems were emotional problems, employment problems and financial problems.

Table 9

Rank Order & Percentile of Veterans Problems DescribedFor Situation 9

Problems	Raw Score	Percent of Total Number of Problems ^a	Percent of Veterans who Listed the Problem ^b
Relationship Problems			
Problems with family or partner	23		
Problems with loneliness	3		
Total	<u>26</u>	28	59
Emotional Problems			
Emotional Problems	10		
Problems with lack of sleep/bad dreams/flashbacks	5		
Problems with abusive behavior	3		
Problems handling stress	1		
Total	<u>19</u>	20	43
Employment Problems	18	19	41
Financial Problems	12	13	27
Existential Problems			
Lack of motivation	2		
Concern about the future	2		
Desire to be happy	1		
Concern about staying alive	1		
Lack of self-esteem	1		
Total	<u>7</u>	8	16
Pain/Physical Problems	4	4	9
Other Problems			
Concern about being an antisocial transient	1		
Concern about housing	1		
Concern about VA claims	1		
Concern about Community	1		
Total	<u>4</u>	4	9
Drug/Alcohol Dependence Problems	3	3	8

^a 93 problems were described for Situation 9.

^b 44 veterans described problems for Situation 9.

Chapter V

Discussion

In this study, the most important results were the negative relationships between the provisions of support and the stress reaction level. The strongest correlation was between the total provisions of support and the stress reaction level. The sources of support cited with greatest frequency in descending order were spouse, friend/neighbor/coworker, professional and parent. Veterans with a larger number of supportive people had fewer symptoms of delayed stress, while those who indicated that no one was available had significantly higher stress levels. Also, those veterans who turned to a spiritual advisor, professional, spouse or friend/neighbor/coworker tended to have lower stress levels. There was a positive relationship between the veterans' stress reaction levels and greater dissatisfaction with the support they perceived to have received.

Research Question One

The uniformly significant and moderately negative correlations between the provisions of social support and the delayed stress reaction level are consistent with Weiss' conception of social support and with Sarason's conception of stress. Weiss (1974) stated

that different relationships provide different types of support and all of these provisional relationships are necessary for emotional well-being. This proposition was demonstrated in this study. As seen in Table 4, the correlation between the total support score and the delayed stress reaction level was stronger than any of the specific provisions. In other words, those veterans who perceived more provisions of support had fewer symptoms of delayed stress. This relationship between stress and social support may also reflect Sarason's (1979) belief that social support from others helps people deal more effectively with stressful situations. Thus, the support perceived by veterans in this study may help these veterans deal with the stress of the Vietnam War more effectively. However, no causal relationship can be verified because of the design of the study. An alternative speculation is that veterans with high levels of stress may be unable to procure social support.

Although the correlations for the subscales and total provisions are significant, they only explain 6% to 28% of the variance in delayed stress reaction levels. The remaining unexplained variance may be due to factors, suggested by other researchers, that were not tested in this study, such as precombat personality

factors (Hendin, Haas, Singer, Gold & Trigos, 1983), the veterans' race and the participation in or witnessing of abusive violence (Laufer et al., 1984; Yager et al., 1984).

Research Question Two

Weiss (1974) believed that people need almost constant accessibility to attachment relationships. This is provided through marriage, a committed intimate relationship; a close friend, sister or mother for women, and buddies for men. The results of this study that are congruent with Weiss' theory are the frequency that veterans turn to their spouse, friend/neighbor/coworker, or parents, and the significant negative correlations between the stress reaction level and spouse and friend/neighbor/coworker. Additionally, these results are consistent with those of Egendorf et al. (1981) who found that married veterans with supportive wives had lower levels of combat related stress.

Interestingly, 20% of the veterans in this sample stated that they preferred to handle stressful situations alone. The frequency of the selection of this category on the PRQ has not been published for non-Vietnam veteran samples and therefore cannot be compared. This finding may reflect one of the symptoms

of PTSD listed in DSM-III (APA, 1980, p. 238) which is feelings of detachment or estrangement from others. Additionally, Lipkin et al. (1982) stated that Vietnam veterans may experience psychological symptoms of paranoia, suspicion, irritability, hostility and phobia about crowds. Similarly, Glover (1984) believed that mistrust is a frequently occurring attitude in Vietnam veterans. This suspicion, irritability and mistrust may lead Vietnam veterans to prefer to handle situations alone instead of relying on others for support. Relationship problems were the most frequent type of problem described in the write-in situation on the PRQ, part 2, by the veterans in this sample. Thus, veterans in this sample who stated they preferred to handle the situation alone may be experiencing feelings of detachment and or mistrust of others. This detachment and mistrust may also be related to the frequency of relationship problems in the veterans in this sample.

Weiss (1974) also stated that relationships are specialized in the type of provisions the person receiving the support gains. It is interesting to note that the source of support that made the most significant difference on delayed stress symptoms varied for situations 3, 8 and 9 as displayed in Table

7. A spouse made the most significant difference for situation 3 ("Have you been concerned about your relationship with your spouse, partner or intimate other in the past six months?"). For situation 8 ("Have you been upset and frustrated with the conditions of your life in the past six months?"), subjects who cited professionals as support providers showed the lowest stress levels compared to those who did not cite professionals and to those who cited other support sources. Because situation 9 does not address a specific problem, there is no specific provision or relationship that could be expected. Although situations 3 and 8 were not designed to test a specific provision of support, one could speculate that the relationship between the source of support and these situations may reflect the type of specialization of relationships that Weiss described.

Research Question Three

Frye and Stockton (1982) found that veterans with symptoms of PTSD also had a negative perception of their family's helpfulness after the war. Escobar et al. (1983) found that Hispanic veterans had more negative emotionality directed toward family members. The third research question explored the relationship between veterans' satisfaction with the support

provided by the sources of support and the current stress reaction level. Veterans with negative perceptions or emotionality toward their families would probably not report high satisfaction with their spouses' support. Therefore, it was hypothesized that there would be a positive relationship between veterans' dissatisfaction score and the stress reaction level. This hypothesis was supported.

The positive correlation may reflect the veteran's need for additional help that his current support system was unable to provide. The support sources that the Vet Center could provide are professional, agency/self-help group, and friends. The veteran had just completed his intake interview at the time of data collection for this study. Therefore, he probably had received little help from the Vet Center at that time.

Although the positive correlations between the delayed stress reaction level and veterans' dissatisfaction with the perceived support provided them are significant, the correlations are not strong. This level of perceived dissatisfaction may indicate that the veteran is not aware of the support others attempt to provide him because of his difficulties with relationships. However, this is only speculative and any interpretation of this finding must be made with

caution because of the small number in this sample who had experienced many of these situations.

Additional Findings

In comparison with subjects in prior research, Egendorf et al. (1981) sampled 1,342 men of draft-eligible age during the Vietnam War, 350 of whom were veterans who had served in the Vietnam war. On the Combat Scale this sample of 350 veterans reported a range of scores from 0 to 13. No one received a maximum score of 14 (Yager et al., 1984). In the present study, the maximum score of 14 by four subjects may reflect a change in society's acceptance of veterans. The higher scores on the Combat Scale in the present study may be related to more accurate or exaggerated reporting of combat experiences because of its increased social desirability. However, this speculation was not tested in this study and veterans in this study did not report significantly different scores on the Combat Scale from the previous study at the Vet Center.

Secondary studies emanating from Legacies of Vietnam state that veterans who were in the Marine Corps reported less stress symptoms during the Vietnam war than veterans who served in other branches of the armed forces reported. Also, those veterans who were

drafted reported more symptoms than those who enlisted (Yager et al., 1984). In comparison, the present study sample had a higher percentage of veterans who served in the Marine Corps. An explanation for this difference may be that the lower stress levels in Marines during the Vietnam war does not indicate the delayed stress levels that those veterans may now experience. Also, the convenience sample for the present study is of veterans who are seeking assistance for symptoms of delayed stress instead of being a sample from the general veteran population. The finding that draftees have more symptoms of delayed stress is consistent with the present sample's high percentage of veterans who had served in the Army. Draftees did not serve in the Navy, Air Force or Marine Corps.

In the content analysis of the responses to the write-in situation on the PRQ, it is interesting to note the number of existential problems that concerned the veterans. These findings are congruent with Lifton et al.'s (1982) belief that Vietnam veterans may experience a profound shattering of their basic concepts of self and humanity. Egendorf (1982) stated that some veterans discussed the meaninglessness of their war experiences and displayed the deficits in

concepts of self and humanity that Lifton et al. described. Egendorf also believed that these problems described by veterans reflect the concepts of existential psychotherapy described by Yalom (1980). Additionally, Lifton and Olson (1976) found that victims of the Buffalo Creek disaster struggled to find sufficient explanation for experiences in order to resolve their inner conflicts about the disaster. All of these authors appear to be describing delayed stress victims' need to find an existential meaning for their experiences in order to obtain an unconflicted self concept.

In the present study, the existential problems described by the veterans may reflect this same phenomena. Additionally, the strongly significant negative relationship between the spiritual advisor and stress reaction level (see Table 5) may indicate that the veterans with a spiritual advisor have found more existential meaning in their experience.

Limitations

There are several factors that could have influenced the outcome of this study. First, the sample was one of convenience, and thus not randomly selected. The sample was small as is common in social psychological studies. Another limitation was that the

data was collected only at the intake interview. This methodological design does not allow testing of causal relationships between delayed stress and social support.

Factors other than social support that influence the delayed stress reaction level were not controlled for in this study. For example, precombat personality factors were found to influence delayed stress reactions by Hendin et al. (1983) and veterans race and witnessing of or participation in abusive violence by Yager et al. (1984) and Laufer et al. (1984). The correlations between the delayed stress reaction level and the social support variables were not strong enough for social support to explain most of the variance in veterans' delayed stress reaction levels.

Intake interviewers who were not oriented to the study by the investigator as well as those who were oriented by the investigator were relied upon to present the study to the prospective subjects. Thus, a lack of consistency in the attitudes conveyed and the information provided by the intake interviewers may have occurred.

Because the PRQ was based on Weiss' empirical research with single parents, it may reflect age and sex biases. This is especially true for persons who

are not around a child or young person. Because the study subjects were men 33 to 45 years old, they may not have had frequent contact with children.

Implications for Nursing

Nurses in a wide variety of settings care for Vietnam veterans. The results of this study suggest that nurses evaluate Vietnam veterans' social support systems as well as their delayed stress reactions. This information can then be used to broaden and strengthen veterans' support systems as suggested by Berman et al. (1982). As indicated by the findings of this study and the conception of Sarason (1979), increasing the effectiveness of the veteran's support system can help the veteran deal more effectively with the stress of his Vietnam experience. This study found a significant correlation between the total provisions of support and delayed stress, and the larger number of sources of support and delayed stress. Therefore, the support system should be broadened to include as many of the provisional relationships as possible so all of the provisions of support are provided. Also, treatment of veterans' delayed stress symptoms could increase their social skills and their trust of others, thus improving the provisions and number of persons in their support system.

Implications for Further Research

Several suggestions for future research are indicated by this study and other studies on the delayed stress reactions of Vietnam veterans. Since many factors affect Vietnam veterans' responses to delayed stress, the relationships among these variables, including social support, and their effect on delayed stress levels need to be investigated. Additional variables that should be measured are precombat personality factors, race, participation in or witnessing of abusive violence, and age at time of service in Vietnam. Also, multiple analysis of variance should be calculated to explore the interactions and causal relationships among the variables.

Information about the relationships between social support variables and delayed stress reactions gleaned from this study and future studies can be used to develop intervention studies that could direct nursing practice. These studies could measure the stress reaction level and social support before and after the social support system has been broadened and strengthened as previously suggested in this study. Also, studies could evaluate the effect of treatments which increase the veterans social skills and trust of

others on their support systems.

Replication of this study is needed to generalize about the population of Vietnam veterans. An increased sample size, a more diverse sample from other parts of the country, and stratification for race, education, socioeconomic level, marital status, branch of service, and years served in Vietnam could provide the information necessary for generalization.

Both the Vietnam Stress Scale and the PRQ need further normative testing. As cited earlier in this study, the veterans most at risk for developing symptoms of PTSD are those who participated or witnessed abusive violence. A measure for abusive violence was not available at the time this study was developed. Therefore, future research could measure the relationship of abusive violence on delayed stress reaction levels instead of the Combat Scale used in the present study.

Chapter VI

Summary

Previous research has indicated that delayed stress reactions in Vietnam veterans were affected by the support they received from others (Egendorf, Kadushin, Laufer, Rothbart, & Sloan, 1981; Frye & Stockton, 1982; Escobar, et al., 1983). This descriptive and correlational study described the relationship between delayed stress reactions and social support in 48 Vietnam veterans who had just completed an intake interview at a Vet Center. The dependent variable, delayed stress reactions, included the subclinical malaise experienced by the majority of veterans and the reactions that are congruent with the DSM-III criteria for post-traumatic stress disorder as measured by the Vietnam Stress Scale. The Personal Resource Questionnaire (PRQ) was used to obtain data regarding the provisions and sources of support for the independent variable.

Three research questions were formulated: 1) What are the relationships between the support provisions of worth, social integration, intimacy, nurturance, and assistance, and the total provisions of support and Vietnam veterans' current delayed stress reaction level? 2) What sources of support are most commonly

indicated by veterans? 3) What are the relationships between these sources and veterans' current delayed stress reaction level?

The hypotheses that there would be a negative relationship between each of the five provisions of support and the total support and the stress reaction level were supported at a significance of $p \leq .05$. The strongest of these correlations was between the total provisions of support and the stress reaction level. The veterans with a larger number of people to turn to for support tended to have fewer symptoms of delayed stress. Also, those veterans who turned to a spiritual advisor, professional, spouse, or friend/neighbor/coworker had lower stress reaction levels. The veterans with more symptoms of delayed stress tended to be more dissatisfied with the support they perceived to have received.

The results of this study have limited generalizability because the sample was a small convenience sample and there were no controls for other factors that affect delayed stress. Causal inferences cannot be drawn from this study because the data were collected only at one point in time. There was a possible lack of consistency in the attitudes and information provided by the intake interviewers, and

the PRQ may have some age and sex biases.

The major contribution of this study is the significant relationship between the provisions of support and delayed stress reactions. The findings might be used by nurses to lend support to their assessment of veterans' social support networks. All types of support are needed to maximize the effectiveness of their provisional relationships. Further, veterans showing symptoms of PTSD should be aided to improve their ability to use support by reducing their symptoms, improving their social skills and increasing their trust of others. Intervention studies should be conducted to quantify to effectiveness of broadening and strengthening the support systems, and to test the effect of increasing the veterans' social skills and trust of others on their support system.

References

- American Psychological Association. (1968).
Diagnostic and statistical manual of mental disorders (2nd ed.). Washington, D. C.: Author.
- American Psychological Association. (1980).
Diagnostic and statistical manual of mental disorders (3rd ed.). Washington, D.C.: Author.
- Berman, S., Price, S., & Gusman, F. (1982). An inpatient program for Vietnam combat veterans in a Veterans Administration hospital. Hospital & Community Psychiatry, 33 (11), 919-922.
- Blank, A. S. (1982). Apocalypse terminable and interminable: Operation outreach for Vietnam veterans. Hospital & Psychiatry, 33 (11), 913-918.
- Bowman, B. (1982). The Vietnam veteran ten years on. Australian and New Zealand Journal of Psychiatry, 16 (3), 107-127.
- Brandt, P. A., & Weinert, C. (1981). The PRQ - A social support measure. Nursing Research, 30 (5), 277-280.
- Caplan, G. (1974). Support systems and community mental health. New York: Behavioral Publications.
- Cassel, J. (1974). Social Science in epidemiology: Psychosocial processes and "stress" theoretical formulations. International Journal of Health Services, 4 (3), 537-549.

- Cobb, S. (1976). Social support as a moderator of life stress. Psychosomatic Medicine, 38 (5), 300-314.
- Dohrenwend, B. S., & Dohrenwend, B. P. (eds.). (1974). Stressful life events: Their nature and effects. New York: John Wiley & Sons.
- Egendorf, A. (1982). The postwar healing of Vietnam veterans: Recent research. Hospital & Community Psychiatry, 33 (11), 901-908.
- Egendorf, A., Kadushin, C., Laufer, R. S., Rothbart, G., & Sloan, L. (1981). Vol. I: Summary of findings. In A. Egendorf, C. Kadushin, R. S. Laufer, G. Rothbart, & L. Sloan, Legacies of Vietnam: Comparative adjustment of veterans and their peers. Washington, D.C.: U S Government Printing Office.
- Erikson, Erik H. (1968). Identity Youth and Crisis. New York: W. W. Norton & Company, Inc.
- Escobar, J. I., Randolph, E. T., Puente, G., Spiwak, F., Asamen, J. K., Hill, M., & Hough, R. L. (1983). Post-traumatic stress disorder in Hispanic Vietnam veterans: Clinical phenomenology and sociocultural characteristics. The Journal of Nervous and Mental Disease, 171 (10), 585-596.
- Flaskerud, J. H., & Halloran, E. J. (1980). Areas of agreement in nursing theory development. Advances in Nursing Science, 3 (1), 1-8.

- Frankl, V. E. (1962). Man's search for meaning (revised ed.). New York: Simon & Schuster.
- Frye, J. S., & Stockton, R. A. (1982). Discriminant analysis of post-traumatic stress disorder among a group of Vietnam veterans. American Journal of Psychiatry, 139 (1), 52-56.
- Glover, H. (1984). Themes of mistrust and the porttraumatic stress disorder in Vietnam veterans. American Journal of Psychotherapy, 37 (3), 445-451.
- Goodwin, J. (1980). The etiology of combat-related post-traumatic stress disorders. In T. Williams (Ed.), Post-traumatic stress disorders of the Vietnam veteran, (pp. 1-23). Cincinnati, Ohio: Disabled American Veterans.
- Hendin, H., Haas, A. P., Singer, P., Gold, F., & Trigoss, G. (1983). The influence of precombat personality on porttraumatic stress disorder. Comprehensive Psychilatry, 24 (6), 530-533.
- Holahan, C. J., & Moos, R. H. (1981). Social support and psychological distress: A longitudinal analysis. Journal of Abnormal Psychology, 90 (4), 365-370.
- Horowitz, M. J., & Solomon, G. F. (1975). A prediction of delayed stress response syndromes in Vietnam veterans. Journal of Social Issues, 31 (4), 67-80.

- Huppenbauer, S. L. (1982). PTSD: A portrait of the problem. American Journal of Nursing, 82 (11), 1699-1703.
- Jones, F. D., & Johnson, A. W., Jr. (1975). Medical and psychiatric treatment policy and practice in Vietnam. Journal of Social Issues, 31 (4), 49-65.
- Kadushin, C., Boulanger, G., & Martin, J. (1981). Vol. IV: Long-term stress reactions: Some causes, consequences, and naturally occurring support systems. In A. Egendorf, C. Kadushin, R. S. Laufer, G. Rothbart, & L. Sloan, Legacies of Vietnam: Comparative adjustment of veterans and their peers. Washington, D.C.: U S Government Printing Office.
- Kahn, R. L. (1979). Aging and social support. In M. W. Riley (Ed.), Aging from birth to death: Interdisciplinary perspectives, (77-91). Boulder, Colorado: Westview Press.
- Kahn, R. L., & Antonucci, T. C. (1980). Convoys over the life course: Attachment, roles and social support. In P. B. Balter and O. G. Brim (Eds.), Life-span development and behavior (Vol. 3) (pp. 253-286). New York: Academic Press.
- Lacoursier, R. B., Godfrey, K. E., & Ruby, L. M. (1980). Traumatic neurosis in the etiology of alcoholism: Vietnam combat and other trauma. American Journal of Psychiatry, 137, 966-968.

- Laufer, R. S., Gallops, M. S., & Frey-Wouters, S. E. (1984). War stress and trauma: The Vietnam veteran experience. Journal of Health and Social Behavior, 25 (March), 65-85.
- Lifton, R. J., & Olson, E. (1976). The human meaning of total disaster. Psychiatry, 39, 1-18.
- Lipkin, J. O., Blank, A. S., Parson, E. R., & Smith, R. (1982). Vietnam veterans and post-traumatic stress disorder. Hospital & Community Psychiatry, 33 (11), 908-912.
- Maxwell, M. (1983). Reported symptomatology among hospitalized Vietnam veterans. Unpublished master's thesis, Southern Illinois University, Carbondale.
- Norbeck, J. S. (1981). Social support: A model for clinical research and application. Advances in Nursing Science, 3 (4), 43-59.
- Paykel, E. S. (1974). Lifestress and psychiatric disorder: Applications of the clinical approach. In B. S. Dohrenwend & B. P. Dohrenwend (Eds.), Stressful life events: Their nature and effects (pp.135-149). New York: John Wiley & Sons.
- Polit, D., & Hungler, B. (1983). Nursing research: Principles and methods (2nd ed.). Philadelphia: J. B. Lippincott Company.

- Resing, M. (1982). Mental health problems of Vietnam veterans. Journal of Psychosocial Nursing and Mental Health Services, 20 (9), 40-43.
- Sarason, I. G. (1979). Life stress, self-preoccupation, and social support (Report SCS-Ls-008). Arlington, Virginia: Office of Naval Research, Organizational Effectiveness Research Program. (Code 452).
- Thoits, P. A. (1982). Conceptual, methodological, and theoretical problems in studying social support as a buffer against life stress. Journal of Health and Social Behavior, 23 (2), 145-159.
- Weinert, C. (1982). Evaluation of the PRQ: A social support measure. A paper presented at the Nursing Roundtable Conference on Social Support and Families of Vulnerable Infants, Lake Wilderness Conference Center, October, 1982.
- Weiss, R. S. (1974). The provisions of social relationships. In Z. Rubin (Eds.), Doing unto others (pp.17-26). Englewood Cliffs, N.J.: Prentice-Hall, Inc.
- Wilson, J. P. (1978). Identity, ideology and crisis, the Vietnam veteran in transition, Part II: Final report to the Disabled American Veterans Association. Cleveland: Cleveland State University.

- Yager, T., Laufer, R., & Gallops, M. (1984). Some problems associated with war experience in men of the Vietnam generation. Archives of General Psychiatry, 41 , April, 327-413.
- Yalom, I. D. (1980). Existential Psychotherapy. New York: Basic Books.
- Zilberg, N. J., Weiss, D. S., & Horowitz, M. J. (1982). Impact of events scale: A cross-validation study and some empirical evidence supporting a conceptual model of stress response syndromes. Journal of Consulting and Clinical Psychology, 50 (3), 407-414.

APPENDICES

APPENDIX A
Correspondence

5905 S. W. Taralynn Pl.
Beaverton, OR 97005
April 20, 1984

David E. Collier, M. S.
Outreach Specialist
Portland Vet Center
2450 S. E. Belmont
Portland, OR 97214

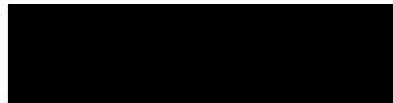
Dear Mr. Collier:

I am a graduate student enrolled in the psychiatric-mental health nursing program at the Oregon Health Sciences University in Portland. This program requires a Master's thesis which will be entitled "The Relationship Between Delayed Stress Reactions and Social Support in Vietnam Veterans."

For the purpose of this study, I would like to have a social support questionnaire administered to Vietnam veterans after their intake interview when they are completing the revised Stress Reaction Scale for the outcome study conducted by yourself and Dr. Drummond. Confidentiality and anonymity of the subjects will be assured.

I will be happy to share with you the findings of this study. I respectfully request your permission to conduct this research project at the Portland Vet Center.

Sincerely,



P. Ann Drum



April 23, 1984

P. Ann Drum
5905 S. W. Taralynn Pl.
Beaverton, OR 97005

Dear Ann:

You have my permission to conduct your research project at the Portland Vet Center. Since your study will be treated as part of our ongoing research and an informed consent will have been obtained from the veterans, only a short cover letter explaining the social support instrument will be necessary. Thank you for your concern for this group of veterans.

Sincerely,



David E. Collier, M. S.
Outreach Specialist


5905 S. W. Taralynn Pl.
Beaverton, OR 97005
April 9, 1984

Clarann Weinert, S. C., Ph. D., R. N.
Montana State University
Bozeman, MT 59717

Dear Dr. Weinert:

In response to our telephone conversation on April 9, 1984, I am requesting written permission to use the Personal Resource Questionnaire (PRQ) for my research. I am a graduate nursing student in psychiatric-mental health nursing at the Oregon Health Sciences University and my thesis advisor is Dr. Virginia Peterson Tilden. Dr. Tilden has a copy of the PRQ and the scoring materials. No changes will be made in the PRQ. My research will study the relationship between social support and current stress levels of Vietnam veterans. The data collected on the PRQ will be submitted to you when the research is completed in approximately one year. Because I am not collecting standard demographic data, only age and sex will be collected, other demographic data cannot be submitted with the results of the PRQ. Thank you for your assistance.

Sincerely,


P. Ann Drum



COLLEGE
-SCHOOL OF NURSING

101

MONTANA STATE UNIVERSITY, BOZEMAN 59717


4/28/84

P. Ann Drum
5905 S.W. Tanalynn Pl.
Beverton, OR 97005

Dear Ms. Drum:

Thank you for your letter of 4/9/84. I am delighted to hear that the PRQ will be utilized in your present study. Best of luck in your work. If I can be of any further help please do not hesitate to contact me. I look forward to the results of your study.

Sincerely,


Clarann Weinert, S.C., Ph.D., R.N.
Education Director/Assistant Professor

APPENDIX B
Vietnam Stress Scale

"VIETNAM STRESS SCALE"

103

_____ # PRE _____ PT1 _____ PT2 _____ PT3 _____ POST _____

Age _____ Sex (check one) Male _____ Female _____
 Branch of service (check one) Army _____ Navy _____ Air Force _____ Marines _____
 When did you service in S.E. Asia? (check all that apply) 1963 or before _____, 64 _____, 65 _____, 66 _____, 67 _____, 68 _____, 69 _____, 70 _____, 71 _____, 72 _____, 73 _____
 What was your main job in S.E. Asia? _____
 How many hours a week (average) were you employed over the last month? _____
 What was your longest period of employment at the same job after the military? _____ (months)

Please circle the numbers below that apply:

0 = NEVER 1 = A LITTLE 2 = SOMETIMES 3 = QUITE A LOT 4 = VERY OFTEN
 (1-2 times (3-4 times (5-6 times (at least EVERY DAY)
 per WEEK) per WEEK) per WEEK)

- | | | | | | | |
|---|---|---|---|---|-----|--|
| 0 | 1 | 2 | 3 | 4 | 1. | Do you have unpleasant dreams/nightmares? |
| 0 | 1 | 2 | 3 | 4 | 2. | Do you feel a lack of motivation? |
| 0 | 1 | 2 | 3 | 4 | 3. | Do you have a difficult time completing what you start? |
| 0 | 1 | 2 | 3 | 4 | 4. | Do you feel like shutting the rest of the world away? |
| 0 | 1 | 2 | 3 | 4 | 5. | Do you drink alcohol or smoke pot to relax? |
| | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 6. | Do you get upset when you see Vietnamese people? |
| 0 | 1 | 2 | 3 | 4 | 7. | Do you find yourself being startled? |
| 0 | 1 | 2 | 3 | 4 | 8. | Do you have trouble sleeping? |
| 0 | 1 | 2 | 3 | 4 | 9. | Do you lose your temper? |
| 0 | 1 | 2 | 3 | 4 | 10. | Do you find it hard to express yourself emotionally? |
| | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 11. | Do you have problems with your memory? |
| 0 | 1 | 2 | 3 | 4 | 12. | Do you have difficulty establishing relationships? |
| 0 | 1 | 2 | 3 | 4 | 13. | Do you feel like you were used by the military? |
| 0 | 1 | 2 | 3 | 4 | 14. | Do you feel it is not worth getting close to others? |
| 0 | 1 | 2 | 3 | 4 | 15. | Do you feel that the older you get the less you need people? |
| | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 16. | Do you get upset when you hear the word Vietnam? |
| 0 | 1 | 2 | 3 | 4 | 17. | Do you worry about losing your temper? |
| 0 | 1 | 2 | 3 | 4 | 18. | Do you find it difficult to trust others? |
| 0 | 1 | 2 | 3 | 4 | 19. | Do you find it difficult to get close to others? |
| 0 | 1 | 2 | 3 | 4 | 20. | Do you ever get depressed? |
| | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 21. | Do you feel like you have been betrayed? |
| 0 | 1 | 2 | 3 | 4 | 22. | Do you get upset when told to do something at work? |
| 0 | 1 | 2 | 3 | 4 | 23. | Do you feel like your life has meaning? |
| 0 | 1 | 2 | 3 | 4 | 24. | Do you feel good about yourself? |
| 0 | 1 | 2 | 3 | 4 | 25. | Do you get upset when you have to deal with authority figures? |
| | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 26. | Do you sometimes suddenly become aggressive? |
| 0 | 1 | 2 | 3 | 4 | 27. | Do you have difficulty falling asleep? |
| 0 | 1 | 2 | 3 | 4 | 28. | Do you get upset at work when others do not meet your standards? |
| | | | | | | |
| 0 | 1 | 2 | 3 | 4 | 29. | Do you feel like hurting yourself or others? |
| 0 | 1 | 2 | 3 | 4 | 30. | Do you feel guilty about things you have seen or done? |

- | | | | | | | |
|---|---|---|---|---|-----|---|
| 0 | 1 | 2 | 3 | 4 | 31. | Do you have trouble getting to work? |
| 0 | 1 | 2 | 3 | 4 | 32. | Do you feel like an outsider in your own community? |
| 0 | 1 | 2 | 3 | 4 | 33. | Do you have vivid recollections of Vietnam? |
| 0 | 1 | 2 | 3 | 4 | 34. | Do you think about Nam unexpectedly? |
| 0 | 1 | 2 | 3 | 4 | 35. | Do you sometimes have dreams/nightmares about Nam? |
| 0 | 1 | 2 | 3 | 4 | 36. | Do you ever wish you were back in Nam? |
| 0 | 1 | 2 | 3 | 4 | 37. | Do you ever feel guilty about surviving? |
| 0 | 1 | 2 | 3 | 4 | 38. | How often do you participate in community activities (e.g. service clubs, church)? |
| 0 | 1 | 2 | 3 | 4 | 39. | How often do you follow the news (e.g. T.V., radios, newspapers)? |
| 0 | 1 | 2 | 3 | 4 | 40. | Do you encounter frustration in showing affection to your children (or wife)? |
| 0 | 1 | 2 | 3 | 4 | 41. | Do you encounter frustration in showing affection to to your parents, brothers, or sisters? |
| 0 | 1 | 2 | 3 | 4 | 42. | Have you talked to your parents about your experiences in Vietnam? |
| 0 | 1 | 2 | 3 | 4 | 43. | Do you have trouble staying asleep? |
| 0 | 1 | 2 | 3 | 4 | 44. | Does your partner describe you as a restless sleeper? |
| 0 | 1 | 2 | 3 | 4 | 45. | Do you find it difficult to stop thinking about Vietnam? |
| 0 | 1 | 2 | 3 | 4 | 46. | Do you have trouble sticking with something you are reading? |
| 0 | 1 | 2 | 3 | 4 | 47. | Do you sometimes for an instant feel like you are in Vietnam? |
| 0 | 1 | 2 | 3 | 4 | 48. | Do certain sounds (e.g. helicopter, backfire, firecrackers, Asian voices) disturb you? |
| 0 | 1 | 2 | 3 | 4 | 49. | Do certain smells or sensations (e.g., warm humid weather, Asian cooking) upset you? |

Below is a list of comments made by people after stressful events, like serving in Vietnam. Please circle each number, indicating how frequently these comments were true for you DURING THE PAST SEVEN DAYS. If they did not occur during that time, please circle the 0 under the "not at all" column.

0=NOT AT ALL 1=RARELY 2=SOMETIMES 3=OFTEN

- | | | | | | |
|---|---|---|---|-----|---|
| 0 | 1 | 2 | 3 | 1. | I thought about it when I didn't mean to. |
| 0 | 1 | 2 | 3 | 2. | I avoided letting myself get upset when I thought about it or was reminded of it. |
| 0 | 1 | 2 | 3 | 3. | I tried to remove it from my memory. |
| 0 | 1 | 2 | 3 | 4. | I had trouble falling asleep or staying asleep. |
| 0 | 1 | 2 | 3 | 5. | I had waves of strong feelings about it. |
| 0 | 1 | 2 | 3 | 6. | I had dreams about it. |
| 0 | 1 | 2 | 3 | 7. | I stayed away from reminders of it. |
| 0 | 1 | 2 | 3 | 8. | I felt as if it hadn't happened or it wasn't real. |
| 0 | 1 | 2 | 3 | 9. | I tried not to talk about it. |
| 0 | 1 | 2 | 3 | 10. | Other things kept making me think about it. |

0=NOT AT ALL 1=RARELY 2=SOMETIMES 3=OFTEN

- 0 1 2 3 11. Pictures about it popped into my head.
- 0 1 2 3 12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.
- 0 1 2 3 13. I tried not to think about it.
- 0 1 2 3 14. Any reminder brought back feelings about it.
- 0 1 2 3 15. My feelings about it were kind of numb.

How often do you use alcohol?

- Daily _____
- 3 times weekly _____
- Several times a month _____
- 2-3 times per year _____
- Never _____

How often do you use non-prescription drugs?

- Daily _____
- 3 times weekly _____
- Several times a month _____
- 2-3 times per year _____
- Never _____

Please check all items that apply to you:

- _____ In an artillery or naval unit which fired on the enemy.
- _____ Flew in an aircraft over Vietnam.
- _____ Stationed at a forward observation post.
- _____ Received incoming fire.
- _____ Encountered mines and booby traps.
- _____ Received sniper or sapper fire.
- _____ Unit patrol was ambushed.
- _____ Engaged VC in a firefight and/or engaged NVA in firefight.
- _____ Saw American and/or Vietnamese killed.
- _____ Wounded.

Do you think your experiences in Vietnam have had a lasting effect on you? (Circle one)

YES NO

COMMENTS: _____

To what extent (Please Circle your choice 1-6):

1. Did you feel comfortable with the atmosphere at the Vet Center?

NOT AT ALL 1 2 3 4 5 COMPLETELY 6

2. Did you feel your problems were addressed?

COMPLETELY 6 5 4 3 2 NOT AT ALL 1

3. Did you feel comfortable with the counselor?

NOT AT ALL 1 2 3 4 5 COMPLETELY 6

4. Have you even had counseling prior to coming to the Vet Center?

Yes _____ No _____

If yes, to what extent were you satisfied with your previous counseling?

COMPLETELY 6 5 4 3 2 NOT AT ALL 1

5. To what extent to you think participation in this program will make a difference in your life?

NOT AT ALL 1 2 3 4 5 COMPLETELY 6

APPENDIX C

Personal Resource Questionnaire

PERSONAL RESOURCE QUESTIONNAIRE

by

Patricia Brandt

Clarain Weinert, S.C.

In our everyday lives there are personal and family events or problems that we must deal with. Some of these problems are listed below. Please consider each statement in light of your own situation. Circle the number before the person(s) that you could count on in each situation that is described. You may circle more than one number if there is more than one source of help that you count on. In addition, we would like to know if you have had this situation or a similar one in the past six months, and how satisfied you feel about the help you received.

Q-1a If you were to experience an emergency, who would you turn to for help?

- 1 PARENT
- 2 CHILD OR CHILDREN
- 3 SPOUSE OR PARTNER
- 4 FORMER SPOUSE OR PARTNER
- 5 RELATIVE
- 6 FRIEND, CO-WORKER, OR NEIGHBOR
- 7 SPIRITUAL ADVISOR
- 8 PROFESSIONAL (NURSE, COUNSELOR, ETC.)
- 9 AGENCY OR SELF-HELP GROUP
- 10 NO ONE (NO ONE AVAILABLE)
- 11 NO ONE (PREFER TO HANDLE IT ALONE)
- 12 OTHER (EXPLAIN) _____

b Have you had an emergency in the past six months?

- 1 YES
- 2 NO

c If you have had an emergency in the past six months, to what extent do you feel satisfied with the help you received?

- 1 VERY SATISFIED
- 2 FAIRLY SATISFIED
- 3 A LITTLE SATISFIED
- 4 A LITTLE DISSATISFIED
- 5 FAIRLY DISSATISFIED
- 6 VERY DISSATISFIED

Q-2a If you needed help for an extended period of time to care for a family member who is sick or handicapped, who would you turn to for help?

- 1 PARENT
- 2 CHILD OR CHILDREN
- 3 SPOUSE OR PARTNER
- 4 FORMER SPOUSE OR PARTNER
- 5 RELATIVE
- 6 FRIEND, CO-WORKER, OR NEIGHBOR
- 7 SPIRITUAL ADVISOR
- 8 PROFESSIONAL (NURSE, COUNSELOR, ETC.)
- 9 AGENCY OR SELF-HELP GROUP
- 10 NO ONE (NO ONE AVAILABLE)
- 11 NO ONE (PREFER TO HANDLE IT ALONE)
- 12 OTHER (EXPLAIN) _____

b Have you needed help in caring for a sick or handicapped family member in the past six months?

- 1 YES
- 2 NO

c If you have needed help in caring for a sick or handicapped family member in the past six months, to what extent do you feel satisfied with the help you received?

- 1 VERY SATISFIED
- 2 FAIRLY SATISFIED
- 3 A LITTLE SATISFIED
- 4 A LITTLE DISSATISFIED
- 5 FAIRLY DISSATISFIED
- 6 VERY DISSATISFIED

Q-3a If you were concerned about your relationship with your spouse, partner, or intimate other, who would you turn to for help?

- 1 PARENT
- 2 CHILD OR CHILDREN
- 3 SPOUSE OR PARTNER
- 4 FORMER SPOUSE OR PARTNER
- 5 RELATIVE
- 6 FRIEND, CO-WORKER, OR NEIGHBOR
- 7 SPIRITUAL ADVISOR
- 8 PROFESSIONAL (NURSE, COUNSELOR, ETC.)
- 9 AGENCY OR SELF-HELP GROUP
- 10 NO ONE (NO ONE AVAILABLE)
- 11 NO ONE (PREFER TO HANDLE IT ALONE)
- 12 OTHER (EXPLAIN) _____

109

b Have you had a concern about your relationship with your spouse, partner, or intimate other in the past six months?

- 1 YES
- 2 NO

c If you have had a concern about your relationship with your spouse, partner, or intimate other in the past six months, to what extent do you feel satisfied with the help you received?

- 1 VERY SATISFIED
- 2 FAIRLY SATISFIED
- 3 A LITTLE SATISFIED
- 4 A LITTLE DISSATISFIED
- 5 FAIRLY DISSATISFIED
- 6 VERY DISSATISFIED

Q-4a If you needed advice regarding a problem with a family member or friend who would you turn to for help?

- 1 PARENT
 - 2 CHILD OR CHILDREN
 - 3 SPOUSE OR PARTNER
 - 4 FORMER SPOUSE OR PARTNER
 - 5 RELATIVE
 - 6 FRIEND, CO-WORKER, OR NEIGHBOR
 - 7 SPIRITUAL ADVISOR
 - 8 PROFESSIONAL (NURSE, COUNSELOR, ETC.)
 - 9 AGENCY OR SELF-HELP GROUP
 - 10 NO ONE (NO ONE AVAILABLE)
 - 11 NO ONE (PREFER TO HANDLE IT ALONE)
 - 12 OTHER (EXPLAIN)
-

b Have you needed advice regarding a problem with a family member or friend in the past six months?

- 1 YES
- 2 NO

c If you have needed advice in the past six months regarding a problem with a family member or friend, to what extent do you feel satisfied with the help you received?

- 1 VERY SATISFIED
- 2 FAIRLY SATISFIED
- 3 A LITTLE SATISFIED
- 4 A LITTLE DISSATISFIED
- 5 FAIRLY DISSATISFIED
- 6 VERY DISSATISFIED

Q-5a If you were having financial problems, who would you turn to for help?

- 1 PARENT
- 2 CHILD OR CHILDREN
- 3 SPOUSE OR PARTNER
- 4 FORMER SPOUSE OR PARTNER
- 5 RELATIVE
- 6 FRIEND, CO-WORKER, OR NEIGHBOR
- 7 SPIRITUAL ADVISOR
- 8 PROFESSIONAL (NURSE, COUNSELOR, ETC.)
- 9 AGENCY OR SELF-HELP GROUP
- 10 NO ONE (NO ONE AVAILABLE)
- 11 NO ONE (PREFER TO HANDLE IT ALONE)
- 12 OTHER (EXPLAIN) _____

b Have you had financial problems in the past six months?

- 1 YES
- 2 NO

c If you have had financial problems in the past six months to what extent do you feel satisfied with the help you received?

- 1 VERY SATISFIED
- 2 FAIRLY SATISFIED
- 3 A LITTLE SATISFIED
- 4 A LITTLE DISSATISFIED
- 5 FAIRLY DISSATISFIED
- 6 VERY DISSATISFIED

Q-6a If you felt lonely, who would you turn to?

- 1 PARENT
- 2 CHILD OR CHILDREN
- 3 SPOUSE OR PARTNER
- 4 FORMER SPOUSE OR PARTNER
- 5 RELATIVE
- 6 FRIEND, CO-WORKER, OR NEIGHBOR
- 7 SPIRITUAL ADVISOR
- 8 PROFESSIONAL (NURSE, COUNSELOR, ETC.)
- 9 AGENCY OR SELF-HELP GROUP
- 10 NO ONE (NO ONE AVAILABLE)
- 11 NO ONE (PREFER TO HANDLE IT ALONE)
- 12 OTHER (EXPLAIN) _____

111

b Have you felt lonely in the past six months?

- 1 YES
- 2 NO

c If you have felt lonely, in the past six months, to what extent do you feel satisfied with the help you have received?

- 1 VERY SATISFIED
- 2 FAIRLY SATISFIED
- 3 A LITTLE SATISFIED
- 4 A LITTLE DISSATISFIED
- 5 FAIRLY DISSATISFIED
- 6 VERY DISSATISFIED

Q-7a If you were sick for a week, who would you turn to for help?

- 1 PARENT
- 2 CHILD OR CHILDREN
- 3 SPOUSE OR PARTNER
- 4 FORMER SPOUSE OR PARTNER
- 5 RELATIVE
- 6 FRIEND, CO-WORKER, OR NEIGHBOR
- 7 SPIRITUAL ADVISOR
- 8 PROFESSIONAL (NURSE, COUNSELOR, ETC.)
- 9 AGENCY OR SELF-HELP GROUP
- 10 NO ONE (NO ONE AVAILABLE)
- 11 NO ONE (PREFER TO HANDLE IT ALONE)
- 12 OTHER (EXPLAIN) _____

b During the past six months, have you been sick for a week?

- 1 YES
- 2 NO

c If you have been sick for a week during the past six months to what extent do you feel satisfied with the help you received?

- 1 VERY SATISFIED
- 2 FAIRLY SATISFIED
- 3 A LITTLE SATISFIED
- 4 A LITTLE DISSATISFIED
- 5 FAIRLY DISSATISFIED
- 6 VERY DISSATISFIED

Q-8a If you were upset and frustrated with the conditions of your life, who would you turn to for help?

- 1 PARENT
- 2 CHILD OR CHILDREN
- 3 SPOUSE OR PARTNER
- 4 FORMER SPOUSE OR PARTNER
- 5 RELATIVE
- 6 FRIEND, CO-WORKER, OR NEIGHBOR
- 7 SPIRITUAL ADVISOR
- 8 PROFESSIONAL (NURSE, COUNSELOR, ETC.)
- 9 AGENCY OR SELF-HELP GROUP
- 10 NO ONE (NO ONE AVAILABLE)
- 11 NO ONE (PREFER TO HANDLE IT ALONE)
- 12 OTHER (EXPLAIN) _____

b Have you been upset and frustrated with the conditions of your life in the past six months?

- 1 YES
- 2 NO

c If you have been upset and frustrated with the conditions of your life in the past six months to what extent do you feel satisfied with the help you received?

- 1 VERY SATISFIED
- 2 FAIRLY SATISFIED
- 3 A LITTLE SATISFIED
- 4 A LITTLE DISSATISFIED
- 5 FAIRLY DISSATISFIED
- 6 VERY DISSATISFIED

Q-9a What has been the greatest concern or problems for you in the past six months? (Briefly describe this problem)

b Who did you turn to for help with this problem?

- 1 PARENT
- 2 CHILD OR CHILDREN
- 3 SPOUSE OR PARTNER
- 4 FORMER SPOUSE OR PARTNER
- 5 RELATIVE
- 6 FRIEND, CO-WORKER, OR NEIGHBOR
- 7 SPIRITUAL ADVISOR
- 8 PROFESSIONAL (NURSE, COUNSELOR, ETC.)
- 9 AGENCY OR SELF-HELP GROUP
- 10 NO ONE (NO ONE AVAILABLE)
- 11 NO ONE (PREFER TO HANDLE IT ALONE)
- 12 OTHER (EXPLAIN) _____

c To what extent were you satisfied with the help you received for the major concern or problem you described above?

- 1 VERY SATISFIED
- 2 FAIRLY SATISFIED
- 3 A LITTLE SATISFIED
- 4 A LITTLE DISSATISFIED
- 5 FAIRLY DISSATISFIED
- 6 VERY DISSATISFIED

Q-10 Below are some statements with which some people agree and others disagree. Please read each statement and circle the response most appropriate for you. There is no right or wrong answer.

STATEMENTS	STRONGLY AGREE	AGREE	SOMEWHAT AGREE	NEUTRAL	SOMEWHAT DISAGREE	DISAGREE	STRONGLY DISAGREE
a. There is someone I feel close to who makes me feel secure.....	7	6	5	4	3	2	1
b. I belong to a group in which I feel important.....	7	6	5	4	3	2	1
c. People let me know that I do well at my work (job, homemaking).....	7	6	5	4	3	2	1
d. Sometimes I can't count on my relatives and friends to help me with important problems.....	7	6	5	4	3	2	1
e. I have enough contact with the person who makes me feel special.....	7	6	5	4	3	2	1
f. I spend time with others who have the same interests that I do.....	7	6	5	4	3	2	1
g. There is little opportunity in my life to be giving and caring to a child or young person.....	7	6	5	4	3	2	1
h. Others let me know that they enjoy working with me (job, committees, projects).....	7	6	5	4	3	2	1
i. There are people who are available if I needed help over an extended period of time..	7	6	5	4	3	2	1
j. Often there is no one to talk to about how I am feeling.....	7	6	5	4	3	2	1
k. Among my group of friends, we do favors for each other.....	7	6	5	4	3	2	1
l. I have the opportunity to encourage others to grow and develop their interests and skills..	7	6	5	4	3	2	1

STATEMENTS	STRONGLY AGREE	AGREE	SOMEWHAT AGREE	NEUTRAL	SOMEWHAT DISAGREE	DISAGREE	STRONGLY DISAGREE
m. My family lets me know that I am important for keeping the family running.....	7	6	5	4	3	2	1
n. I have relatives or friends that will help me out even if I can't pay them back.....	7	6	5	4	3	2	1
o. When I am upset there is someone I can be with who lets me be myself.....	7	6	5	4	3	2	1
p. I often feel no one has the same problems as I.....	7	6	5	4	3	2	1
q. I enjoy doing little "extra" things that make a child's or young person's life more pleasant.....	7	6	5	4	3	2	1
r. I know that others appreciate me as a person.....	7	6	5	4	3	2	1
s. There is someone who loves and cares about me.....	7	6	5	4	3	2	1
t. I have people to share social events and fun activities with.....	7	6	5	4	3	2	1
u. I am responsible for helping to provide for a child's or young person's needs.....	7	6	5	4	3	2	1
v. If I need advice there is someone who would assist me to work out a plan for dealing with the situation.....	7	6	5	4	3	2	1
w. I have a sense of being needed by a child or young person.....	7	6	5	4	3	2	1
x. Sometimes people think that I'm not as good a friend as I should be.....	7	6	5	4	3	2	1
y. If I got sick there is someone to give me advice about caring for myself.....	7	6	5	4	3	2	1

APPENDIX D
Informed Consent

I, _____,
 (First Name) (Middle Initial) (Last Name)

agree to serve as subject in the study, "The Relationship Between Delayed Stress Reactions and Social Support in Vietnam Veterans," under the supervision of Dr. Virginia Tilden and Ann Drum, R.N. The study aims to describe the function and effects of social support on the reaction to stress of the combat experiences in the Vietnam veteran.

It is my understanding that I will be asked to complete a questionnaire about my relationship to other people who provide me support. These answers will be compared to my responses to the Vet Center questionnaire that I am also completing. This additional questionnaire will take about ten minutes to complete.

The information I give will be treated confidentially. My anonymity will be maintained by the use of code numbers on all the documents.

Although I will not receive direct benefit from these questionnaires, the information gained by this study will benefit future programs for Vietnam veterans.

Ann Drum, R.N. and Dr. Tilden have offered to answer any questions I might have about this study and its uses. I can contact them through the Oregon Health Science University, Mental Health Nursing Department, telephone number 225-7827.

It is not the policy of the Department of Health and Human Services, or any other agency funding the research project in which you are participating, to compensate or provide medical treatment for human subjects in the event the research results in physical injury. The Oregon Health Sciences University, as an agency of the State, is covered by the State Liability Fund. If you suffer injury from the research project, compensation would be available to you only if you establish that the injury occurred through the fault of the University, its officer or employees. If you have further questions please call Dr. Michael Baird, M.D., at (503) 225-8014.

I understand I may refuse to participate, or withdraw from this study at any time without affecting my relationship with, or medical treatment at the Portland Vet Center.

I have read the above and agree to participate in this study.

Date: _____ Signature: _____

Witness: _____

APPENDIX E

Table

TABLE E-1

Frequency of Sources of Support For Each Situation

Source	<u>Situations</u>								
	1	2	3	4	5	6	7	8	9
Parent	19	14	6	12	16	6	12	6	6
Child	2	1	1	0	0	6	2	0	1
Spouse	30	19	12	20	11	29	26	21	22
Former Spouse	1	0	2	0	0	1	0	0	0
Relative	12	1	4	4	5	7	6	7	4
Friend/Neighbor/Coworker	18	3	12	11	4	18	8	12	15
Spiritual Advisor	5	5	4	9	0	6	0	5	5
Professional	7	1	17	13	5	4	11	16	18
Self-help Group/Agency	3	7	8	9	9	3	2	15	13
No One Available	4	4	6	4	5	5	3	2	3
Prefer to Handle Alone	7	11	8	7	12	7	13	13	7
Other	0	1	0	1	0	0	0	0	0
Mean Number of Sources	2.21	1.85	2.00	2.00	1.43	2.05	1.74	2.16	2.21

AN ABSTRACT OF THE THESIS OF
P. ANN DRUM
FOR THE MASTER OF NURSING

DATE OF RECEIVING THIS DEGREE: June 1985

TITLE: THE RELATIONSHIP BETWEEN DELAYED STRESS REACTIONS
AND SOCIAL SUPPORT IN VIETNAM VETERANS.

Previous research has indicated that delayed stress reactions in Vietnam veterans were affected by the support they received from others (Egendorf, Kadushin, Laufer, Rothbart, & Sloan, 1981; Frye & Stockton, 1982; Escobar, et al., 1983). This descriptive and correlational study described the relationship between delayed stress reactions and social support in 48 Vietnam veterans who had just completed an intake interview at a Vet Center. The dependent variable, delayed stress reactions, included the subclinical malaise experienced by the majority of veterans and the reactions that are congruent with the DSM-III criteria for post-traumatic stress disorder as measured by the Vietnam Stress Scale. The Personal Resource Questionnaire (PRQ) was used to obtain data regarding the provisions and sources of support for the independent variable.

Three research questions were formulated: 1) What are the relationships between the support provisions of

worth, social integration, intimacy, nurturance, and assistance, and the total provisions of support and Vietnam veterans' current delayed stress reaction level? 2) What sources of support are most commonly indicated by veterans? 3) What are the relationships between these sources and veterans' current delayed stress reaction level?

The hypotheses that there would be a negative relationship between each of the five provisions of support and the total support and the stress reaction level were supported at a significance of $p \leq .05$. The strongest of these correlations was between the total provisions of support and the stress reaction level. The veterans with a larger number of people to turn to for support tended to have fewer symptoms of delayed stress. Also, those veterans who turned to a spiritual advisor, professional, spouse, or friend/neighbor/coworker had lower stress reaction levels. The veterans with more symptoms of delayed stress tended to be more dissatisfied with the support they perceived to have received.

The results of this study have limited generalizability because the sample was a small convenience sample and there were no controls for other factors that affect delayed stress. Causal inferences cannot be drawn from this study because the data were collected only at one point in time. There was a

possible lack of consistency in the attitudes and information provided by the intake interviewers, and the PRQ may have some age and sex biases.

The major contribution of this study is the significant relationship between the provisions of support and delayed stress reactions. The findings might be used by nurses to lend support to their assessment of veterans' social support networks. All types of support are needed to maximize the effectiveness of their provisional relationships. Further, veterans showing symptoms of PTSD should be aided to improve their ability to use support by reducing their symptoms, improving their social skills and increasing their trust of others. Intervention studies should be conducted to quantify to effectiveness of broadening and strengthening the support systems, and to test the effect of increasing the veterans' social skills and trust of others on their support system.