A DESCRIPTION OF DEPRESSION LEVELS OF VIETNAM VETERANS AND NON-VETERANS

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We hereby recommend that the thesis prepared under our supervision by Alice Diane Gerulis entitled "A Description of Depression Levels of Vietnam Veterans and Non-Veterans"

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DEDICATION

This thesis is dedicated to the special people in my life:

To Larry, my love--for caring, sharing, and . . . being the special person he is.

To Mom and Dad--for their unrelenting love, encouragement, and support which made this goal attainable.

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DIANE GERULIS

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CHAPTER I

INTRODUCTION

The Vietnam War evoked concern and introspection in the lives of most Americans. Hundreds of thousands of Americans in uniform at the time have returned to civilian life. The focus of this investigation is on those who waged the war. Since the de-escalation of the Vietnam War, the Vietnam veteran has become the subject of increasing investigation and concern.

How has this war experience affected their lives? Because of substantial public and political interest in this area, the social science literature has chronologically lagged behind the often sensationalized media accounts. Most of the findings concerning the Vietnam veteran are revealed in narrative explanations which may offer over-generalizations rather than empirically based studies. At this point it is impossible to do more than speculate; there is not enough substantial data to do otherwise.

In particular, now, more than a decade since its onset and more than four years since the end of the

Vietnam War, what are the psychological residuals, if any, of this war? What impact has this war experience had on returning soldiers? How have the Vietnam veterans synthesized their experiences? Will more veterans than ever before suffer delayed psychiatric difficulties? These questions remain unanswered.

Therefore, this study was undertaken to investigate one possible latent manifestation of this war experience. Specifically, it was the aim of this study to measure the level of depression of Vietnam veterans and compare it to the level of depression of non-veterans.

Statement of the Problem

Is there a significant difference between the levels of depression experienced by Vietnam veterans and non-veterans?

Statement of Purposes

1. To determine the level of depression experienced by Vietnam veterans
2. To determine the level of depression experienced by non-veterans

3. To determine if a significant difference exists between the levels of depression experienced by Vietnam veterans and non-veterans
4. To explore the presence of depression as a possible latent psychological reaction to the Vietnam War experience

Background and Significance

The literature indicates that the Vietnam War not only shares common stressors with previous wars, but is a different and unique war, accompanied by new stressors. "Because it is a guerrilla war, it is different in kind from the other wars that Americans have fought since their Revolution" (Levy 1973, p. 79). In addition to the stressors of guerrilla warfare, Fox (1972, p. 441) contends that "another feature of the Vietnam war that appeared to contribute to the adaptational tasks of its veterans was public opinion and dissent about the war." Solomon et al. (1971, p. 522) confirm these opinions:

> A number of special features of the Vietnam conflict, including various unique aspects of the experience in Indochina . . . and the widespread unpopularity of the war, especially among the young, have obvious implications for psychiatric sequelae.

What are the effects of Vietnam War stressors on individuals returned to civilian life? There is a wide divergence of findings. The effects of the Vietnam War are viewed by Levy (1973, p. viii) as a psychological disorientation prone to violence that is detrimental to society. In contrast, Petersen (1974, p. 60) describes the returning Vietnam veteran as an individual with acquired assets which contribute in a positive manner to society, and furthermore, states that opposing views are misperceptions.

The Post-Vietnam Syndrome, as described by Shatan (1973, pp. 645-648; 1972, p. 301), encompasses six basic themes resulting from Vietnam War experience:

1. Guilt feelings manifested in behavior which invites self-punishment
2. Feelings of having been scapegoated; feel used, betrayed, deceived by all elements of society
3. Feelings of rage with no outlet for violent impulses

4. Emotional anesthesia attendant to combat brutalization
5. Alienation and detachment from feelings and people
6. Anguished doubt about their continued ability to love and trust others, and to accept affection

Lifton (1970, p. 556) proposes that various psychological disturbances can be expected to appear in Vietnam veterans "ranging from mild withdrawal to periodic depression to severe psychosomatic disorder to disabling psychosis." Shatan (1973, p. 644) reported many symptoms he witnessed in Vietnam veterans--"growing apathy, cynicism, alienation, depression, mistrust, and expectations of betrayal, as well as inability to concentrate, insomnia, nightmares, restlessness, uprootedness, and impatience with almost any job or course of study."

As can be seen the psychodynamic effects of the Vietnam War cited in the literature cover a broad spectrum of symptoms. However, the theme of depression, whether labelled explicitly or inferred through symptomatology is recurrent.

A search of the literature reveals few studies which uphold the high incidence of depressive syndromes

in returned Vietnam veterans (Goldsmith and Cretekos 1969; Strange and Brown 1970; Fox 1972). It must be noted that all of these studies included subjects who had returned from Vietnam between 1967 and 1969, subjects manifesting problems within one year of their return. In addition, subjects of the three separate studies were either psychiatric admissions or referrals to military facilities. Furthermore, none of the studies based diagnosis of depression on standardized, measurable criteria.

While there appears to be general agreement that Vietnam veterans may experience depression, there is no distinction regarding onset of symptoms. "The incidence of neuropsychiatric illness in U.S. Army troops in Viet Nam is lower than any recorded in previous conflicts" (Tiffany 1967, p. 1586).

> However, it is becoming increasingly apparent that this represents only a part of the overall picture of the psychological effects of this war on the men who serve . . . ironically it is many of the factors which help to keep psychiatric casualties low in Viet Nam which serve to compound the readjustment difficulties of the veteran when he returns (Bourne 1971, p. 21).

Polner (1971, p. 143) contends that "there is an increasing recognition by psychiatrists that in many returnees a threat of latent psychiatric difficulty exists."

In view of these opinions regarding latent effects of the Vietnam War, how long can the Vietnam veteran be considered vulnerable? Helmer (1974, p. 221) states that "these problems may last up to two or more years." Shatan (1973, p. 645) proposes that psychic injuries peak in the second year after return from Vietnam, but suggests that problems may exist even until death. Lifton (1970, p. 556) concurs that problems may appear early in some, "but in others lie dormant for a period of months or even years." It is not surprising, then, that Strange and Brown (1970, p. 488) point to the "potential value in studying the longer-range psychological effects."

Although the literature indicates a tentatively high incidence of depression in Vietnam veterans, as well as the potential for latent reactions, there is a need for research which studies these factors simultaneously. It appears likely that depressive manifestations may persist over a long period of time, however, only research can move beyond speculation. Since Vietnam veterans comprise a significant segment of our society, it is reasonable and imperative that investigation continue.

The theoretical framework on which this study is based is Aaron Beck's theory of depression. Beck's central thesis is that depressed individuals commit characteristic logical errors. More specifically, they tend to distort experiences in the direction of self-blame and self-depreciation (Beck 1974, p. 63). There are many theories of depression; however, Beck's theory is research based and consequently, affords a systematic, measurable description of depression. Beck (1974, p. 62) describes the symptoms of depression in emotional, cognitive, motivational, and physical domains. Beck (1967, p. 274) states that differential diagnosis of depression is based on cognitive content and overall level of impairment. Beck (1974, p. 67) has devised a "Depression Inventory" which measures the depth of depression based on quantifiable psychological, physiological, and behavioral manifestations of depression. The Depression Inventory distinguishes varying degrees of depression and also "reflects changes in the severity of depression following an interval of time" (Beck 1974, p. 67).

In this study depression was measured in Vietnam veterans and non-veterans. What relevance has this to the nursing profession? It is the responsibility of nurses to identify those segments of society which may be

considered of high risk for psychiatric problems. Furthermore, the nurse must be attuned to the special needs of such individuals whether she be functioning at a preventive, a secondary, or a tertiary level of nursing practice (Neuman 1974, pp. 99-114).

Hypothesis

There is no significant difference between the levels of depression experienced by Vietnam veterans and non-veterans.

Definition of Terms

1. Depression - an abnormal state of the organism manifested by signs and symptoms such as low subjective mood, pessimistic and nihilistic attitudes, loss of spontaneity, and specific vegetative signs. This variable may be construed in terms of a continuum, extending in a series of fine gradations from the neutral point (no depression) to an end point (maximal depression) (Beck 1967, pp. 201-202).

2. Level of Depression - a measure of depression based on Beck's Depression Inventory. A score of nine or less indicates nondepressed. A score of ten or more indicates depression.

3. Vietnam War - Indochina conflict actively involving the United States Armed Forces from 1964-1974.

4. Vietnam Veteran - white male student born between 1938 and 1955 who served in the United States Armed Forces in Vietnam.

5. Non-veteran - white male student born between 1938 and 1955 who has never served in the United States Armed Forces.

6. Student - individual enrolled for classes at an institution of higher learning.

Limitations

The following variables may have influenced the study results, but were not controlled for by design:

1. Stressors encountered since return from Vietnam
2. Hawthorne and Halo effects
3. Money, time, and presence of only one investigator
4. Prisoners of war or who were in any way dangerously separated from their assigned unit (in the Indochina conflict)

The following variables may have influenced the results and were not controlled for by design, but were described:

1. Religion
2. Marital status
3. Socioeconomic status
4. Number of hours employed per week
5. Student status and number of hours enrolled
6. Physical trauma sustained during Vietnam War
7. Pre-war psychiatric disposition
8. Psychiatric treatment received during military service or since military discharge
9. Disciplinary action incurred in the military or in the community following return from Vietnam
10. Length of time spent in Vietnam
11. Time elapsed between return from Vietnam and military discharge
12. Time elapsed between military discharge and participation in this study
13. Self report of active combat or combat support experience in Vietnam
14. Branch of military service and rank while in Vietnam

15. Number of years served in military service
16. Convictions about the war while in Vietnam
17. History of drug or alcohol abuse and consequent treatment

Delimitations

This study was delimited to white male students born between 1938 and 1955 of Vietnam veteran or non-veteran status.

Assumptions

1. It was assumed that all subjects responded honestly to the demographic data on the Personal Data questionnaire and to the Depression Inventory.
2. It was assumed that depression is measurable.
3. It was assumed that depression is a familiar feeling state as well as a distinct clinical entity.
4. It was assumed that war may be a potential cause of abnormal psychological states.

Summary

The Vietnam War has reportedly induced a broad range of psychological problems in Vietnam veterans. Symptomatology of this reaction is reportedly of delayed onset or of latent manifestation. The study was concerned with investigating the level of depression of Vietnam veterans as compared to the level of depression of non-veterans.

The following chapter is a review of the literature which includes an account of the Vietnam experience and subsequent psychological disturbances, studies specifically indicating incidence of depression, depression and resultant consequences, and the theoretical framework selected--Beck's theory of depression. Chapter III includes a description of the setting and population, the method of data collection, and the treatment of the data. The analysis and interpretation of the data will be presented in Chapter IV. Chapter V, the final chapter, includes a review of the entire study, a presentation of conclusions, and implications, as well as recommendations for further study.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The review of literature is divided into four subheadings. The first section includes a discussion of the stressors unique to the Vietnam War as well as of related psychological sequelae. Studies of various resulting psychological disorders are reviewed in addition to consideration of latent manifestation of symptoms. The second section focuses on studies specific to depression. The third section examines depression as a disease entity including a discussion of the consequences of this clinical entity. The fourth and final section presents Aaron Beck's theory of depression discussing the applicability of Beck's theory to a study of depression in Vietnam veterans.

The Vietnam Experience

The central thesis of this paper is that there are unique aspects of the Vietnam War which may produce long-lasting psychological consequences for the returning

veteran. In addition to common war stressors such as separation from friends and family, exposure to traumatic events, prolonged life-threatening situations, and general physical discomfort, the Vietnam War was accompanied by stressors unique to guerrilla warfare. Guerrilla warfare is marked by lack of clarity of the identity of the enemy (Solomon et al. 1971, p. 522). Inability to distinguish between civilians who aligned themselves with Americans and those who rejected American presence provided the need to remain suspicious of Vietnamese of all ages. There was also the absence of a distinguishable front line which provoked constant surveillance as compared to previous wars characterized by strategic en masse attack (Bourne 1970, p. 482).

Additional factors include the novel rotation policy and public controversy. While the one year rotation policy limited exposure to prolonged bombardment, it was also responsible for the return of men to the United States "in small groups instead of returning en masse to tickertape victory parades" (O'Neill and Fontaine 1973, p. 153). The Vietnam returnee did not receive hero celebrations, rather he was greeted with rampant public controversy. "Varied attitudes towards the Vietnam War prevailed and the opposition of military and civilian

populations was relatively frequent" (Horowitz and Solomon 1975, p. 69).

In effect, the special readjustment problems encountered by returning Vietnam veterans are added onto those adjustment problems faced by veterans of previous wars as well as adjustment problems they already share with their age group peers (Stenger 1974, p. 37). It is important to note that many of these Vietnam veterans were adolescents and, in some cases, still living at home at the time they entered the service (O'Neill and Fontaine 1973, p. 153).

> With the advent of the Viet Nam conflict there was every reason to believe the incidence of psychiatric casualties would be high. The physically demanding conditions of jungle warfare, the ubiquitous enemy, and the absence of established battle lines, plus the political controversy surrounding the conflict, all suggested that the stress on the individual GI would be considerable (Bourne 1970, p. 482).

However, the incidence of neuropsychiatric illness among Vietnam returnees has been reported to be significantly lower than for veterans of previous wars (Tiffany 1967, p. 1585). In stark contrast to this report are numerous clinical reports which indicate widespread and debilitating psychological problems among Vietnam returnees (Fox 1972; Lifton 1973; Shatan 1973).

The discrepancies can be explained in two major ways. The report by Tiffany (1967) was made during the early part of the war, prior to the TET offensive--a massive offensive attack by the Communist forces in January 1968 (Jones and Johnson 1975, p. 60). The high point of American involvement in Vietnam was reached in 1969 (Jones and Johnson 1975, p. 61). No reports were revealed in the literature search to support this premature announcement. Secondly, Shatan (1973, p. 644), for example, cites instances in which frequently the physical accompaniments of anxiety led to exclusively non-psychiatric diagnoses. "The situation was exacerbated by the fact that, especially in the early years of the war, the number of Armed Forces psychiatrists in the Far East remained small" (DeFazio, Rustin, and Diamond 1975, p. 158). Bloch (1969, p.289) reports that the Army utilized fewer than twenty psychiatrists which represents a distribution of one psychiatrist per 18,000 men.

What, then, are the effects of Vietnam War stressors on individuals returned to civilian life? Neither the military nor the Veterans Administration has undertaken large scale, systematic studies of the returning Vietnam soldier population (Borus 1974, p. 554). The literature search revealed a wide divergence of findings.

Petersen (1974) is the sole supporter of the view that the returning Vietnam veteran acquired a maturity during his combat experience which contributes in a positive manner to society. The remaining studies are dichotomized on a continuum of unacceptable behavior ranging from violence prone aggressive behavior to behavior reflecting anxiety inwardly directed.

Levy (1973, p. viii) reports that psychological disorientation caused by the Vietnam War produces veterans prone to violence. Likewise, Yager (1976, p. 1332), in a study of postcombat behavior, reports that nearly forty percent of thirty-one Vietnam returnee subjects had been involved in at least one act of violence against another person since returning from combat. However, he further reports that soldiers with postcombat violent behavior more frequently than nonviolent subjects had a history of fighting in childhood or adolescence, of volunteering for Vietnam, of reporting that they had killed four or more persons, and of re-enlisting for additional tours of duty in Vietnam (Yager 1976, p. 1335).

In contrast are numerous studies which view Vietnam veterans as victims of internalized psychological disturbances. Worthington (1976, p. 169) offers the theoretical concept of "anomie" to provide a meaningful

approach to examine both the social and psychological ramifications of Vietnam experience. "Anomie," according to Worthington (1976, p. 169), is a label for an individual condition of anxiety, frustration, confusion, uncertainty, depersonalization, despair, hopelessness, and social isolation. Worthington (1976, p. 169) regards these characteristics as behavioral states in a perception of events that render it difficult for a person to locate sense and order in the action of others.

Lifton (1974, p. 47) discusses the psychology of the survivor in relation to the Vietnam veteran--the psychological tasks associated with witnessing and surviving death. The Vietnam returnee is, first of all, faced with the struggle of anxiety he continues to feel in association with the indelible images of suffering, dying, and death that constitute the survivor's "death imprint" (Lifton 1974, p. 47). This anxiety struggle is accompanied by feelings of guilt and shame stemming directly from the war experience. Lifton (1974, p. 47) states that these feelings may relate simply to the fact that he survived while so many others died, or may focus on the specific loss of friends. This does not exclude the guilt resulting from having killed enemy soldiers or conceivably civilians--children or adults. However, the

overall psychological task, according to Lifton (1974, p. 47), is to find meaning and justification in having fought and killed, and in having survived. The Vietnam returnee must consciously or unconsciously give some type of form to the extreme experience of war in order to afford meaning to the rest of his life. Failure to accomplish these psychological tasks may result in consequences ranging from mild withdrawal to disabling psychosis (Lifton 1970, p. 556).

The most widely publicized report of psychological sequelae resulting from the Vietnam War is that by Shatan (1972). Shatan (1972, p. 301; 1973, pp. 645-648) described the Post-Vietnam Syndrome which encompasses six basic themes: self-punitive behavior resulting from guilt feelings, feelings of deception and betrayal, feelings of rage, emotional anesthesia, alienation and attachment, and dubious ability to love and trust. Expanding the Post-Vietnam Syndrome, Shatan (1973, p. 648) contends that unconsummated grief results from the Vietnam War experience--"an impacted grief in which an encapsulated, never-ending past deprives the present of meaning." Furthermore, Shatan (1973, p. 648) states that the veterans' numbed apathy from a surfeit of bereavement is frequently misperceived as cynicism.

Strayer and Ellenhorn (1975, p. 81), in a study of forty veterans regarding adjustment patterns and attitudes, reveal that severe depression, hostility, and guilt are characteristic descriptors of the veteran sample population. Similarly, Renner (1973, p. 174) contends that "for men who cannot rationalize their behavior, the war becomes a degrading and an amoral struggle producing significant conscious and unconscious feelings of guilt and depression." This observation coincides with those of Strange and Arthur (1967, p.284) who noted the atmosphere of depression that existed on psychiatric wards in Vietnam. The previous two reports are based on subjective data as well as on small sample populations as in much of the literature regarding Vietnam readjustment.

In addition to the subjective studies discussed which label depression, many studies report symptoms such as nightmares, insomnia, withdrawal, pessimism, and vegetative signs which are accepted as indicators of depressive illness (Shatan 1973, p. 644; Lifton 1970, p. 556). A review of the literature reveals a broad spectrum of symptoms of the psychodynamic effects of the Vietnam War. However, the theme of depression, whether labelled explicitly or inferred through symptomatology, is recurrent.

Accompanying this theme of depression is a strong indication that the effects of the Vietnam War may witness delayed onset. The threat of latent psychiatric difficulty is recognized by Polner (1971, p. 143), Helmer (1974, p. 221), Shatan (1973, p. 645), and Lifton (1970, p. 556).

> Persons exposed to severe stress, perhaps not until after an extended period of relief or latency will have (a) recurrent intrusive dreams, nightmares, daytime images, and waves of painful emotional re-experience, and (b) ideational denial, emotional numbing, and behavioral construction. Such syndromes may continue for decades (Horowitz and Solomon 1975, p. 68).

The combination of depression incidence and latent manifestation points to the value of studying longer range psychological effects of the Vietnam War. This view is consistent with that of Strange and Brown (1970, p. 488). There is, consequently, a need for research which examines these factors simultaneously.

Studies Specific to Depression

As previously stated in Chapter I, three studies explicitly uphold the high incidence of depressive syndromes in returned Vietnam veterans (Goldsmith and Cretekos 1969; Strange and Brown 1970; Fox 1972). These studies included Vietnam veterans who had returned from Vietnam between 1967 and 1969, therefore, manifesting

problems within one year of their return to the United States. Consequently, latent manifestation was not considered. The sample populations of all three studies were either admissions to or referrals to military psychiatric facilities. All of these studies based diagnosis of depression on professional opinion. Two additional studies specific to depressive disorders encompassed larger sample populations, but continued to examine Vietnam returnees within a maximum of twenty-eight months of their return from Vietnam (Helzer, Robins, and Davis 1976; Nace et al. 1977).

Helzer, Robins, and Davis (1976) examined a random sample of 470 Army enlisted men who served tours of duty in Vietnam. Twenty-six percent of the total sample reported at least some symptoms of depression, and seven percent reported a full affective syndrome; a third of those with depressive syndromes had psychiatric care since their return (Helzer, Robins, and Davis 1976, p. 177). Data analyzed in this study were collected through personal interviews and information obtained from military records and Veterans Administration files (Helzer, Robins, and Davis 1976, p. 177). Furthermore, no control group was utilized.

Since the collection of data for this study, an additional study of depression in Vietnam veterans has been located. This study by Nace et al. (1977) is the only study which employed an objective, standardized means of measuring depression. The sample population consisted of 202 Vietnam veterans who had returned from combat within a period of twenty-eight months. Approximately one third of the sample population fell within the clinically depressed range category (Nace et al. 1977, p. 167). No control group was utilized, and the latent manifestation element was neglected.

The above discussion of studies pertinent to depressive syndromes, once again illustrates the need for further research which simultaneously investigates the occurrence of depression and the latent manifestation of symptoms in Vietnam veterans.

Depression and Resultant Consequences

Nursing literature states that the term "depression" may refer to a feeling or a distinct clinical entity. As a feeling, depression is a normal, familiar experience ranging from occasional "blueness" to grief. Depression as a clinical entity consists of prolonged, severe feelings of grief and loss with which a person is

unable to cope (Cohan and Rodgers 1977, p. 1007). With respect to specific depressive symptoms, the difference between neurotic and psychotic depressive reactions is quantitative rather than qualitative (Beck 1967, p. 86). The Diagnostic and Statistical Manual of Mental Disorders (1968, p. 38) distinguishes between neurotic and psychotic depression "depending on whether the reaction impairs reality testing or functional adequacy enough to be considered a psychosis." Therefore, depression may be conceptualized as one extreme of a sadness continuum.

The distressing human experience of depression is described in man's earliest records from Egyptian manuscripts to the Old Testament to writings of ancient Greek physicians (Beck 1977, p. 94). Depression is viewed as one of the major health problems of this decade and is the most common psychiatric disorder encountered by office practitioners and in outpatient clinics (Beck 1974, p. 61). In addition to these factors, depression is the most common precursor of suicide (Solomon and Patch 1971, p. 326). Beck (1974, p. 61) contends similarly that suicide is a by-product of depression. In fact, Beck (1972, p. 81) proposes that prompt diagnosis and treatment of depression is frequently a matter of life and death.

A report entitled, "Status of Suicide in Veterans Administration Hospitals" (Farberow and Williams 1978) analyzes suicides which have occurred among all Veteran Administration hospitals during the fiscal years 1973 - 1975. Farberow and Williams (1978, p. 11) determined that Vietnam era veterans now comprise the greatest overcontribution to the suicides. They comprise 28.3 percent of the suicides, contributing disproportionately by seventeen percent. In contrast, World War II veterans make up thirty-six percent of the suicides, but undercontribute by eighteen percent.

Accordingly, Eisenhart (1975, p. 13) reports that the 1971 Emergency Ministry for Veteran Services of the National Council of Churches statistics demonstrate that over 49,000 Vietnam veterans have died since discharge and return to civilian life. These deaths have primarily been caused as a result of suicides, drug overdoses, and vehicular accidents. This fact, along with the previous discussion of suicide in Veterans Administration hospitals, when viewed in relation to the link between suicide and depression further compounds the need to scientifically determine the possible latent manifestation of depression in Vietnam veterans. An additional ramification of depression may also be witnessed in the incidence of over

200,000 unemployed Vietnam veterans (Strayer and Ellenhorn 1975, p. 82).

Beck's Theory of Depression

The theoretical framework selected for this study was Aaron Beck's theory of depression. The essence of Beck's theory is that depressed individuals tend to commit characteristic logical errors; tend to distort experiences in the direction of self-blame and self-depreciation (Beck 1974, p. 63). The affective state of depression exists secondary to these negative cognitions (Blaney 1977, p. 204).

There are many different theories of depression with each theoretical position emphasizing one or another aspect of depression at the expense of others (Davis and Neale 1974, p. 182). However, while Beck's theory is cognitively oriented, his theory encompasses all aspects of depressive symptomatology, succinctly encompassing main tenets of all theories. Rather than focusing only on cognitive dysfunction, Beck describes symptoms in the emotional, motivational, physical, and vegetative realms as well as the cognitive perspective (Beck 1974, p. 62).

The emotional manifestations of depression, changes in feelings, or overt behavior attributable to the feeling state, include dejected mood, negative feelings toward self, reduction in gratification, loss of emotional attachments, crying spells, and loss of mirth response (Beck 1973, p. 14-19). The motivational manifestations include paralysis of the will, avoidance, escapist, and withdrawal wishes, suicidal wishes, and increased dependency (Beck 1973, pp. 24-29). Loss of appetite, sleep disturbance, loss of libido, and fatigability are encompassed by the label vegetative and physical manifestations (Beck 1973, pp. 31-34). The cognitive manifestations include low self-evaluation, negative expectations, self-blame, and self-criticism, indecisiveness, and distortion of body image (Beck 1973, pp. 19-24). Symptomatology described by Beck (1973, pp. 34-40) extends to include a wide range of delusional patterns and hallucinations, physical characteristics such as sad facies, stooped posture, reduction in spontaneous activity, and the opposing ceaseless activity of agitation.

Beck's theory proposes to account for neurotic, exogenous depression (Blaney 1977, p. 203). Consequently, Beck's theoretical approach is conducive to the study of war-induced depression. Another factor which renders

this theorist conducive to this study is that Beck's theory is research-based and offers a systematic, measurable description of depression. Beck has developed a tool, the Depression Inventory, which permits quantifiable diagnosis of depression (Beck 1967, p. 189).

The purpose for the development of the Depression Inventory was to attempt to decrease or eliminate the problem of the variability of clinical diagnosis and to provide a standardized, consistent measure that would not be sensitive to theoretical orientation, idiosyncracies, or inconsistencies of the individual administering the tool (Beck 1967, p. 187). Therefore, the questions of the Depression Inventory were developed on the basis of their relationship to the overt behavioral manifestations of depression. Consequently, the Depression Inventory does not reflect any theory regarding the etiology or the underlying psychological processes in depression (Beck 1967, p. 189).

In addition to the aforementioned attributes of Beck's theory is the systematic cognitive therapy developed by Beck (1976). Therefore, it can be seen that Beck has systematically developed a theory of depression which encompasses all clinical concerns from a reliable diagnosis to an appropriate treatment approach. In fact,

Beck stresses the need for prompt and proper diagnosis, believing that appropriate treatment of depression can result in complete recovery in seventy to ninety-five percent of the cases (Beck 1973, p. 54).

Summary

Stressors unique to the Vietnam War are believed to compound the stressors of previous wars. A review of the literature reveals numerous studies demonstrating a wide range of psychological problems in Vietnam returnees. The theme of depression is repetitive as is the contention that onset of symptoms may be delayed or latently manifested. The following chapter describes the method utilized to determine the level of depression manifested by Vietnam veterans as contrasted with depression levels of non-veterans.

CHAPTER III

PROCEDURE FOR THE COLLECTION AND TREATMENT OF DATA

Introduction

For the purposes of this study, research of the descriptive approach was employed. The primary concern of descriptive research is to discover new facts by obtaining accurate and meaningful descriptions of the phenomena under study (Abdellah and Levine 1965, pp. 425-426).

This descriptive study was designed to measure the depression levels of Vietnam veterans and non-veterans through the use of the Depression Inventory. After these levels were determined, analysis of the collected data was performed to ascertain if a significant difference existed between the two designated groups.

This chapter presents a complete description of the collection and treatment of data. This chapter is divided into five sections. The first section discusses the setting from which the data were collected. A description of the study population is included in the

second section. The third section presents the tool utilized. The fourth section discusses the complete account of the data collection procedure, and the final section describes the procedure followed for the treatment of data.

Setting

The study was conducted in a large metropolitan city in Central Texas. The setting was a three-city block area in the center of a business district located near a university of approximately 40,000 students. The setting was one which is heavily frequented between the hours of 9:00 A.M. and 10:00 P.M., seven days a week, by students from the nearby university.

Population

The total population was predominantly characterized by white students, male and female, between the ages of eighteen and thirty. Of the approximately 40,000 students enrolled in the university, approximately twenty percent were twenty-five years of age or older, and 1,000 were Vietnam veterans. This represented the largest concentration of Vietnam veterans in the geographic area.

The nonprobability sample (Abdellah and Levine 1965, p. 309) of this study consisted of twenty-one participants; seventeen were non-veterans, and four were Vietnam veterans. The Vietnam veteran sampling was considerably lower than the anticipated thirty subjects in spite of the extended data collection period. It appears that the Vietnam veteran student does not frequent the social setting popular with non-veteran students. This behavior may be regarded as a manifestation of the social isolation and alienation from others of Vietnam veterans described in the literature (Tucker and Gorman 1967, p. 854; Shatan 1973, pp. 645-648; Worthington 1976, p. 169).

Voluntary participants were selected from the setting as described according to the following criteria: male, white student, born between 1938 and 1955 and of Vietnam veteran or non-veteran status. No individual meeting the sample population criteria refused to participate in the study.

The sample population consisted of predominantly single male graduate students of atheistic or agnostic belief. The sample population was stratified along many of the demographic variables and represented a wide range within each variable. The average age was 26.76. A great majority of the sample population was employed, with an average of 16.67 working hours per week and an average annual income of $6,500.00. This was generally consistent with the total population.

Tool

The tool utilized in this study was a questionnaire consisting of two sections. The first section, labelled "Personal Data," was used to collect demographic information. The second section was Beck's "Depression Inventory."

Beck's Depression Inventory was used to measure depression levels of the sample population. A copy of this tool appears in Appendix A. The Depression Inventory is a twenty-one item inventory composed of twenty-one separate categories of symptoms and attitudes. "Each category describes a specific behavioral manifestation of depression and consists of a graded series of four to five

self-evaluative statements" (Beck 1967, p. 189). Several methods for determining the reliability of this tool were used (Beck 1967, pp. 194-195).

1. Item analysis - the protocols of 200 consecutive cases were analyzed. The score for each of the categories was compared with the total score on the Depression Inventory for each individual. All categories showed a significant relationship to the total score. Significance was beyond the .001 level for all categories except weight loss which was significant at the .01 level. A later item analysis of 606 cases showed positive correlations at the .001 level.

2. Split-half reliability - the Pearson r between the odd and even categories was computed and yielded a reliability coefficient of .86; with a Spearman Brown correction, this coefficient rose to .93.

3. Variation of test-retest method - administration of the Depression Inventory at two different times to the same population at two- to five-week intervals indicated a consistent relationship of the instrument to the subject's clinical state.

4. Indirect measures of inter-rater reliability - revealed a very high degree of consistency among the interviewers.

Beck (1967, pp. 194-195) states that traditional methods of assessing reliability, such as the test-retest method and the inter-rater reliability method, are not appropriate for appraisal of the Depression Inventory for the following reasons:

> If the inventory were readministered after a short period of time, the correlation between the two sets of scores could be spuriously inflated because of a memory factor. If a long interval were provided, the consistency would be lowered because of fluctuations in the intensity of depression occurring in psychiatric patients. The same factors precluded the successive administration of the test by different interviewers.

Validity of this tool (Beck 1967, pp. 195-207) is as follows:

1. Concurrent validity - the Depression Inventory showed significant correlations with other tests of depression. It correlated more highly with the MMPI D-scale and with the Lubin check list than the latter tests correlated with each other. The difference among the means for each category of the Depression Inventory categories indicates that with each increment in the magnitude of depression, there is a progressively higher mean

score. The p-value of these differences is <0.001 (Kruskal-Wallis test). A Pearson biserial r was computed to determine the degree of correlation between Depression Inventory scores and the clinical judgments of depth of depression. Two such investigations revealed biserial coefficients of .65 and .67.

2. Construct validity was established by Beck on the basis of support for major predictive hypotheses. Beck contends that use of the Depression Inventory by other investigators provides additional evidence of the construct validity of the tool.

Data Collection

Prior to implementation of this study, permission was received from the thesis committee and the Human Research Review Committee of the Texas Woman's University. A copy of the Human Research Review Committee permission letter is presented in Appendix B.

Agency permission was not indicated. The investigator was verbally advised by the City Attorney that the method planned for collection of data was within the prescribed bounds of city ordinances (Harris 1978).

Subjects were selected according to the aforementioned criteria as the investigator canvassed the setting. Canvassing continued for a period of four consecutive weeks in May and June 1978 for approximately five hours per day. It had been anticipated that sixty subjects would be encountered in a two-week period. The time limit was extended to provide the twenty-one subjects on whom this study is based.

Participation in the study was stricly voluntary. Each participant was provided with an oral explanation of the study including a summary of the aims of the study and the procedure for participation, including the potential risks and benefits involved as well as proposed means of eliminating risks. A copy of this oral explanation appears in Appendix C. Willingness to participate in the study was evidenced by the participant's signature on Form B (Appendix D).

Each participant was given a questionnaire by the investigator. The participants were asked to respond as accurately as possible. Written instructions on the Depression Inventory directed the participants to select one answer per item. The setting provided no comfortable seating arrangement. The investigator remained near the participant to answer further questions. Participants

placed completed questionnaires in a locked container provided by the investigator. Questionnaires remained in the locked container until the end of the data collection period. No identifying information was required on the questionnaire to insure anonymity of subjects.

Treatment of Data

Each questionnaire was examined to ascertain that directions for completion were followed. All questionnaires were appropriately completed. Consequently, every questionnaire was included in the study.

The Depression Inventories were scored in accordance with the instructions of the developer (Beck 1967, pp. 333-337). The Depression Inventory is composed of twenty-one categories of attitudes and symptoms. Each category describes a specific manifestation of depression. Each item of the Depression Inventory consists of a graded series of four to five self-evaluative statements. Numerical values from zero to three were assigned by Beck (1967, pp. 333-335) to each statement to indicate the degree of severity. The depression score is the sum of the responses as weighted by the developer. The score of ten and above was considered to be indicative of the

depressive range of the Depression Inventory. Scores of less than ten were considered non-depressed. This was consistent with Beck's (1967, p. 203) scoring instructions.

Depression Inventory data were analyzed using the t-test for a small population to test for significance of difference in the mean scores. The 0.05 level of significance was utilized as the standard of significance.

The Personal Data section of the questionnaire was utilized for the purpose of obtaining pertinent demographic data. A description of these data appears in the following chapter.

Summary

A descriptive study was conducted to determine if a significant difference exists between the depression levels of non-veterans and the depression levels of Vietnam veterans. Twenty-one subjects from a university setting comprised the sample population. The sample population consisted of seventeen non-veterans and four Vietnam veterans. Data were collected utilizing a questionnaire consisting of two sections--Personal Data and Beck's Depression Inventory. The data were analyzed

using a t-test for a small population. A complete description of the analysis of data appears in the following chapter, Chapter IV.

CHAPTER IV

ANALYSIS OF DATA

Introduction

A descriptive design was employed to answer the question: Is there a significant difference between the levels of depression experienced by Vietnam veterans and non-veterans? The purposes of this study were fourfold: to determine the level of depression experienced by Vietnam veterans, to determine the level of depression experienced by non-veterans, to determine if a significant difference exists between the levels of depression experienced by Vietnam veterans and non-veterans, and to explore the presence of depression as a possible latent psychological reaction to Vietnam War experience.

The sample population consisted of twenty-one participants: seventeen non-veterans and four Vietnam veterans. Subjects were asked to voluntarily participate in the study and to respond as accurately as possible to the questionnaire utilized. Mean scores were examined using a t-test for small populations to

provide analysis of group differences between the Vietnam veteran and non-veteran depression scores.

An analysis and interpretation of the data collected during this study will be presented in two sections. The first section will present a description of the data collected from the Personal Data portion of the questionnaire. The second section will focus on the statistical findings derived from Beck's Depression Inventory.

Description of Personal Data Variables

The age range of the sample population was 23 to 34, with a grand mean of 26.76. The mode of the sample population was 24, with a median of 27. This finding was consistent with the age of the population sampled.

The non-veteran sample population revealed a mean age of 26.18, with a mode of 24 and a median of 26. The ages of the non-veteran sample population ranged from 23 to 34. The Vietnam veteran group revealed a mean age of 29.25, with a median of 30. The range was from 27 to 30. No mode was calculated for this group because each subject was a different age.

Table 1 presents a comparison of the ages of the Vietnam veteran and non-veteran sample population.

TABLE 1

COMPARISON OF AGES OF VIETNAM VETERAN AND NON-VETERAN SAMPLE POPULATION BY MEAN, MEDIAN, AND MODE

	Non-veteran (N=17)	Vietnam Veteran (N=4)	Total (N=21)
Range	23-34	27-30	23-34
$\bar{x}$	26.18	29.25	26.76
$\tilde{x}$	26.00	30.00	27.00
x_m	24.00	-----	24.00

The Vietnam veteran group tended to be older than the non-veteran group.

The marital status of the sample population revealed a stratified sampling with each category represented in the sample population. Nine subjects, or 42.86 percent, of the sample population were single. This was consistent with the population sampled.

The married segment of the sample population was four, or 19.05 percent. Similar representation was revealed for the divorced segment of the sample

population--four, or 19.05 percent divorced. Three, or 14.29 percent, of the sample population reported co-habitation with the remaining one, or 4.75 percent separated.

Table 2 presents a comparison of the marital status of the non-veteran and Vietnam veteran sample population by percentage.

TABLE 2

COMPARISON OF MARITAL STATUS OF VIETNAM VETERAN AND NON-VETERAN SAMPLE POPULATION BY PERCENTAGE

Marital Status	Non-Veteran		Vietnam Veteran		Total	
	Percent	N	Percent	N	Percent	N
Single	47.06	8	25.00	1	42.86	9
Cohabitating	11.76	2	25.00	1	14.29	3
Married	17.65	3	25.00	1	19.05	4
Divorced	17.65	3	25.00	1	19.05	4
Separated	5.88	1	-----	-	4.75	1
Total	100.00	17	100.00	4	100.00	21

In Table 3 the Vietnam veteran and non-veteran sample population are compared by religious preference

TABLE 3

COMPARISON OF RELIGIOUS PREFERENCE OF VIETNAM VETERAN AND NON-VETERAN SAMPLE POPULATION BY PERCENTAGE

Religious Preference	Non-Veteran		Vietnam Veteran		Total	
	Percent	N	Percent	N	Percent	N
Atheist/Agnostic	47.06	8	50.00	2	47.62	10
Catholic	23.53	4	-----	-	19.05	4
Protestant	5.88	1	25.00	1	9.52	2
Other	23.53	4	25.00	1	23.81	5
Total	100.00	17	100.00	4	100.00	21

The religious preference of the sample population revealed a sampling with each category except the Jewish faith represented in the sample population. Ten subjects, or 47.62 percent of the sample population, reported agnostic or atheist preference. This was generally consistent with the total population sampled.

Five, or 23.81 percent, reported "other" ranging from Christian Enlightenment to Hindu. Catholicism was represented by four, or 19.05 percent of the popu-

lation, with the remaining two subjects, or 9.52 percent, reporting the Protestant faith.

The majority of the sample population was employed for an average of 16.67 hours per week, with a range from zero to over forty hours. This was generally consistent with the population sampled. The non-veterans were employed for an average of 13.53 hours per week, and the Vietnam veterans 30.00 hours per week. Likewise, the Vietnam veteran sample population tended to have the greater annual income ($12,025.00) as compared to an average annual income of $5,206.00 for the non-veteran group. Source of income data was not obtained. It is likely that the Vietnam veterans' annual income is somewhat inflated because of income from the GI Bill educational benefits. It was anticipated that Vietnam veterans would more likely be employed full time as compared to part time employment for the non-veteran sample population (age, marital status). The grand mean annual income was $6,505.00. This was generally consistent with the population sampled. Table 4 presents a comparison of annual income and weekly hours employed of the sample population.

TABLE 4

COMPARISON OF ANNUAL INCOME AND WEEKLY HOURS EMPLOYED OF THE VIETNAM VETERAN AND NON-VETERAN SAMPLE POPULATION BY MEAN

	Non-Veteran (N=17)	Vietnam Veteran (N=4)	Total (N=21)
Annual Income $\bar{X}$	$5,206	$12,025	$6,505
Weekly Hours Employed $\bar{X}$	13.53	30.00	16.67

The majority of the sample population consisted of graduate students. This was an expected finding because of the age range delimitation of this study. Sixteen, or 76.19 percent, reported graduate status, while five, or 23.81 percent, were undergraduates. Thirteen, or 76.47 percent of the non-veteran sample population, were graduate students, and four, or 23.53 percent, reported undergraduate status. The Vietnam veteran sample population consisted of three, or 75.00 percent graduate students, and one, or 25.00 percent, undergraduate status. A summary of these results are presented in Table 5.

TABLE 5

COMPARISON OF STUDENT STATUS OF THE VIETNAM VETERAN AND NON-VETERAN SAMPLE POPULATION BY PERCENTAGE

Student Status	Non-Veteran		Vietnam Veteran		Total	
	Percent	N	Percent	N	Percent	N
Graduate	76.47	13	75.00	3	76.19	16
Undergraduate	23.53	4	25.00	1	23.81	5
Total	100.00	17	100.00	4	100.00	21

The graduate students of the sample population were enrolled for an average of 9.50 semester hours, with a range from 3 to 15. The mode was 9, and the median was 9. The undergraduate sample population was enrolled for an average of 13.00 semester hours, with a range of u to 15. The mode for this group was 15, with a median of 15. This finding was consistent with the total population.

The graduate students of the non-veteran sample population revealed a range of 3 to 15, with an average of 9.85 semester hours. The mode and median were each 9. The graduate students of the Vietnam veteran sample population were enrolled for an average of 8.00 semester

hours, with a range of 6 to 12. The mode and median were each 6.

The undergraduate students of non-veteran status were enrolled for an average of 12.50 semester hours, with a range of 7 to 15, a median of 14, and a mode of 15. The sole undergraduate student of Vietnam veteran status was enrolled for 15 semester hours.

Table 6 presents a comparison of semester hours enrolled according to student status.

TABLE 6

COMPARISON OF SEMESTER HOURS ENROLLED ACCORDING TO STUDENT STATUS OF THE NON-VETERAN AND VIETNAM VETERAN GROUPS BY MEAN, MEDIAN, AND MODE

Student Status	Semester Hours	
	Non-Veteran	Vietnam Veteran
Graduate	N=13	N=3
Range	3-15	6-12
$\bar{x}$	9.85	8.00
$\tilde{x}$	9.00	6.00
x_m	9.00	6.00
Undergraduate	N= 4	N=1
Range	7-15	
$\bar{x}$	12.50	15.00
$\tilde{x}$	14.00	15.00
x_m	15.00	15.00

Analysis and Interpretation of Depression Inventory Scores

The raw scores of the Depression Inventory for the sample population revealed a range from 0 to 19, with a mode of 0, a median of 2, and a mean score of 5.29.

The raw scores of the non-veteran group revealed a range of 0 to 13, with a mode of 0.2, a median of 2, and a mean score of 4.76.

The Vietnam veteran group revealed raw scores ranging from 0 to 19, with a mode of 0, a median of 5.50, and a mean score of 7.50.

A t-test for small populations was utilized to provide an analysis of group differences between non-veteran depression scores and Vietnam veteran depression scores. When the data were analyzed by the t-test for a difference in means, it was found not to be statistically significant. The results of this comparison are presented in Table 7.

TABLE 7

NON-VETERAN GROUP COMPARED TO VIETNAM VETERAN GROUP BY DEPRESSION INVENTORY SCORES

Non-Veteran (N=17)	Vietnam Veteran (N=4)
$\bar{x} = 4.76$	$\bar{x} = 7.50$

$t = .87$
$df = 19$
$p =$ no significance

Although no statistically significant difference was found, an examination of the scores by percentages suggests a tendency toward depression by Vietnam veterans. A comparison of depression scores by percentage appears in Table 8.

TABLE 8

DEPRESSION INVENTORY SCORES OF NON-VETERANS AND VIETNAM VETERAN SAMPLE POPULATION BY PERCENTAGE

Depression Inventory Score	Non-Veteran		Vietnam Veteran		Total	
	Percent	N	Percent	N	Percent	N
0 - 9	70.59	12	50.00	2	66.67	14
10+	29.41	5	50.00	2	33.33	7
Total	100.00	17	100.00	4	100.00	21

Seven, or 33.33 percent of the sample population, scored 10 or above, indicative of depression. Fourteen, or 66.67 percent, scored below 10, representing no depression.

Twelve, or 70.59 percent, of the non-veteran group scored in the nondepressed range of the Depression Inventory with 5, or 29.41 percent, scoring depressed. Two, or 50 percent of the Vietnam veterans, scored 0 (nondepressed), and two, or 50 percent, were depressed.

In addition the Vietnam veterans revealed the highest raw score on the Depression Inventory--nineteen--as compared to a high raw score of thirteen in the non-veteran group. The mean scores also revealed a slightly higher tendency toward depression by Vietnam veterans.

Description of Military History Variables

Because of this tendency toward depression by Vietnam veterans, the personal data which focused on military history were examined. These data revealed a stratified sampling in regard to military rank and branch of military service. Two of the participants reported experiencing active combat the length of their Vietnam tour; one reported combat support experience; with the fourth participant reporting six months of each combat support and active combat. One participant reported pro-war convictions while in Vietnam, while three participants reported they had formulated no

opinion. None of the participants reported military or social disciplinary action encountered since return from Vietnam. One participant reported having been physically wounded while in Vietnam as a result of shrapnel in the left forearm.

The average tour of duty in Vietnam was 9.75 months, with a range from 3 to 13 months. The average time since return from Vietnam was 8.0 years, with a range from 6 to 11 years. This finding revealed that the tendency toward depression of the Vietnam veteran group was accompanied by an average of 8 years since the combat experience. This finding is consistent with the literature which suggests that latent manifestation of symptoms may be expected as a result of Vietnam War experience.

The average length of stay in the military was 3.38 years, with a range from 2.50 to 4 years. The average number of years since discharge was 6.50, with a range of 2 to 10 years.

Table 9 presents a summary of the military history data.

TABLE 9

SUMMARY OF MILITARY HISTORY DATA OF VIETNAM VETERAN SAMPLE POPULATION

Branch of Service	Rank	Type of Combat	Wounded	War Con-victions	Vietnam Tour (Months)	Yrs.Since Return From Vietnam	Years In Military	Years Since Discharge
Navy	Ensign	Support	No	None	3	6	4	2
Army	E-5	Active	No	None	12	8	2.5	7
Air Force	Sgt.	Active	No	Pro-War	11	7	4	7
Marines	Corp.	Active/ Support	Yes	None	13	11	3	10
					$\bar{x}$=9.75	$\bar{x}$=8.0	$\bar{x}$=3.38	$\bar{x}$=6.50

None of the participants of this study reported a history of drug or alcohol abuse requiring psychiatric or medical treatment. However, the response of the sample population to question number eight of the questionnaire revealed that three participants of the total sample population had received some form of psychiatric service. "Psychiatric service" was utilized as a broad treatment category with no specific data collected. Two of these participants were Vietnam veterans and had scored in the depressed level of the Depression Inventory.

Responses of these two Vietnam veterans to questions number eighteen and twenty of the questionnaire revealed that psychiatric services were received following military discharge. Both participants denied receiving psychiatric services previous to or during the Vietnam War experience. This finding supports the literature which suggests that the need for psychiatric treatment may result from the Vietnam War experience.

Summary

No statistically significant difference was found to exist between the depression levels of Vietnam veterans and the depression levels of non-veterans.

Therefore, the null hypothesis was not rejected--There is no significant difference between the levels of depression experienced by Vietnam veterans and non-veterans. However, a trend or tendency toward a higher level of depression was indicated by the fact that fifty percent of the Vietnam veteran sample population scored in the depressed range of the Depression Inventory as compared to 29.41 percent of the non-veteran sample population. The Vietnam veteran group revealed the highest raw score on the Depression Inventory--nineteen--as compared to a high raw score of thirteen in the non-veteran group.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

A descriptive nonexperimental study was implemented to investigate the depression levels of Vietnam veterans. The purposes of the study were to determine the level of depression experienced by Vietnam veterans, to determine the level of depression experienced by non-veterans, to determine if a significant difference exists between the levels of depression experienced by Vietnam veterans and non-veterans, and to explore the presence of depression as a possible latent psychological reaction to Vietnam War experience. The tool utilized for measurement of depression was Beck's Depression Inventory.

A review of the literature indicated a wide range of psychological problems as a result of Vietnam experience. A recurrent theme of depression was revealed both explicitly and through reported symptoms. In addition to this tentative depression prediction was the speculation of delayed onset of symptoms or latent manifestation.

Therefore, this study was designed to simultaneously investigate depression and latent manifestation in Vietnam veterans.

The sample population for this study consisted of twenty-one voluntary participants--seventeen non-veterans and four Vietnam veterans. Measurement of depression levels of the sample population was performed through the use of a standardized, quantifiable tool--Beck's Depression Inventory. No statistically significant difference was found to exist between the depression levels of Vietnam veterans and the depression levels of non-veterans. Therefore, the null hypothesis was not rejected--There is no significant difference between the levels of depression experienced by Vietnam veterans and non-veterans. However, a tendency toward depression in Vietnam veterans was revealed and indicates further study.

Conclusions

The following conclusions were derived from this study:

1. No statistically significant difference was found to exist between the depression levels of Vietnam veterans and non-veterans;

however, a tendency of Vietnam veterans toward depression was revealed.

2. The low number of Vietnam veteran participants may support the literature which predicts withdrawal behavior manifested by social isolation and alienation from others.
3. Latent manifestation of depression symptoms may be a result of Vietnam War experience.
4. Vietnam War experience may result in the need for psychiatric treatment regardless of pre-war psychiatric disposition.
5. The conclusions of this study cannot be generalized to populations other than this sample population.

Implications

As a result of this study, several implications for nursing are suggested:

1. Nurses should be aware that Vietnam veterans may be experiencing depression as a result of Vietnam War experience.
2. Vietnam veterans may mask signs of depression with somatic manifestations. Therefore,

nurses need to be alert to the spectrum of depression symptoms including the relationship of depression to suicide. Nurses should be aware of depression assessment tools and of intervention theories.

3. Vietnam veterans may tend to be socially isolated and alienated from others. Nurses should realize that this may indicate a need for special outreach approaches of a preventive nature. Nurses should be alert to the needs of the family system of which the Vietnam veteran is a member.

Recommendations

The recommendations resulting from this study are:

1. Similar investigations should be conducted with larger sample populations to validate the Vietnam veterans' tendency toward depression as well as to investigate other possible psychological trauma.

2. Further investigations of the psychological effects of Vietnam War experience should be systematically conducted on a long range basis to further explore the possibility of latent manifestation of symptoms.
3. Further studies should be designed focusing on the tendency of Vietnam veterans to be socially isolated and alienated. This may result in recommendations for the setting of future studies.
4. Outreach programs may need to be developed to assist Vietnam veterans and their families in the readjustment tasks subsequent to Vietnam War experience.
5. Studies should be conducted to explore the possible differences between Vietnam veterans who were enlisted as compared to those who were drafted.
6. Further research should be conducted to explore the psychodynamic effects as a result of successfully avoiding the draft.

7. Studies should be conducted to investigate possible intervening variables such as war convictions, enlistee or draftee status, and length of tour of duty in Vietnam.
8. Further research is indicated to investigate Vietnam veterans in settings other than formal education.

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APPENDIX A

STUDY QUESTIONNAIRE

QUESTIONNAIRE

1. Do not write your name or any other identifying data on this questionnaire.
2. Please answer every question. Circle the answer you select or provide the requested information in the space provided as indicated.
3. Regardless of the number of alternatives provided, please mark only one answer per question.

PART I - Personal Data

1. When were you born? Month_____ Day____ Year____

2. What is your marital status?
   a. Cohabitating
   b. Divorced
   c. Married
   d. Separated
   e. Single

3. What is your religious preference?
   a. Atheist or agnostic
   b. Catholic
   c. Jewish
   d. Protestant
   e. Other, please specify_____

4. What is your present annual income?
   _____ per year

5. How many hours are you employed per week?
   _____ hours per week

6. How many semester hours are you enrolled in this semester?
   _____ semester hours

7. What is your present student status?
   a. graduate
   b. undergraduate

8. Have you ever received psychiatric services?
   a. yes Please specify year(s) during which
   b. no treatment was received._____

9. Have you ever received medical or psychiatric treatment for drug (including alcohol) use?
   a. yes Please specify year(s) during which treat-
   b. no ment was received._____

10. Have you served in the United States Armed Forces?
   a. yes
   b. no

11. Did you serve in Vietnam?
   a. yes
   b. no

*If you responded "no" to question number 11, please proceed to Part II, question number 24.

*If you responded "yes" to question number 11, please continue with question number 12 below.

12. How long was your tour of duty in Vietnam?
   _____ months

13. Indicate the branch of service with which you served in Vietnam.
   a. Army
   b. Air Force
   c. Marines
   d. Navy
   e. Other, please specify_____

14. What was the highest rank you achieved while in Vietnam?
   _____

15. What type of combat did you experience while in Vietnam?
   a. active combat
   b. combat support

16. Were you physically wounded in Vietnam?
   a. yes Please specify type of injury and year
   b. no sustained_____

17. What were your convictions about the Vietnam War while you were in Vietnam?
   a. anti-war
   b. pro-war
   c. no opinion formulated
   d. other, please specify_____

18. How many years has it been since your return from Vietnam?
    _____ years

29. Did you receive any psychiatric services while you were in the military?
    a. yes While in Vietnam? ___yes __no
    b. no

20. Have you received any psychiatric services since your military discharge?
    a. yes
    b. no

21. Have any military or social disciplinary actions been taken against you since your return from Vietnam?
    a. yes, please specify __military __social
    b. no

22. How long has it been since you were discharge from the military?
    _____ years

23. How many years did you serve in the Armed Forces?
    _____ years

PART II - DEPRESSION INVENTORY

24. a. I do not feel sad
    b. I feel blue or sad
    c. I am blue or sad all the time and I can't snap out of it
    d. I am so sad or unhappy that it is very painful
    e. I am so sad or unhappy that I can't stand it

25. a. I am not particularly pessimistic or discouraged about the future
    b. I feel discouraged about the future
    c. I feel I have nothing to look forward to
    d. I feel that I won't ever get over my troubles
    e. I feel that the future is hopeless and that things cannot improve

26. a. I do not feel like a failure
    b. I feel I have failed more than the average person
    c. I feel I have accomplished very little that is worthwhile or that means anything
    d. As I look back on my life all I can see is a lot of failures
    e. I feel I am a complete failure as a person (parent, husband, wife)

27. a. I am not particularly dissatisfied
    b. I feel bored most of the time
    c. I don't enjoy things the way I used to
    d. I don't get satisfaction out of anything any more
    e. I feel as though I am very bad or worthless

29. a. I don't feel I am being punished
    b. I have a feeling that something bad may happen to me
    c. I feel I am being punished or will be punished
    d. I feel I deserve to be punished
    e. I want to be punished

30. a. I don't feel disappointed in myself
    b. I am disappointed in myself
    c. I don't like myself
    d. I am disgusted with myself
    e. I hate myself

31. a. I don't feel I am any worse than anybody else
    b. I am very critical of myself for my weaknesses or mistakes
    c. I blame myself for everything that goes wrong
    d. I feel I have many bad faults

32. a. I don't have any thoughts of harming myself
    b. I have thoughts of harming myself, but I would not carry them out
    c. I feel I would be better off dead
    d. I have definite plans about committing suicide
    e. I feel my family would be better off if I were dead
    f. I would kill myself if I could

33. a. I don't cry any more than usual
    b. I cry more now than I used to
    c. I cry all the time now. I can't stop it.
    d. I used to be able to cry, but now I can't cry at all even though I want to.

34. a. I am no more irritated now than I ever am
    b. I get annoyed or irritated more easily than I used to
    c. I feel irritated all the time
    d. I don't get irritated at all at the things that used to irritate me

35. a. I have not lost interest in other people
    b. I am less interested in other people now than I used to be
    c. I have lost most of my interest in other people and have little feeling for them
    d. I have lost all my interest in other people and don't care about them at all

36. a. I make decisions about as well as ever
    b. I am less sure of myself now and try to put off making decisions
    c. I can't make decisions any more without help
    d. I can't make any decisions at all any more

37. a. I don't feel I look any worse than I used to
    b. I am worried that I am looking old or unattractive
    c. I feel that there are permanent changes in my appearance and they make me look unattractive
    d. I feel that I am ugly or repulsive looking

38. a. I can work about as well as before
    b. It takes extra effort to get started at doing something
    c. I don't work as well as I used to
    d. I have to push myself very hard to do anything
    e. I can't do any work at all

39. a. I can sleep as well as usual
    b. I wake up more tired in the morning than I used to
    c. I wake up 1-2 hours earlier than usual and find it hard to get back to sleep
    d. I wake up early every day and can't get more than 5 hours sleep

40. a. I don't get any more tired than usual
    b. I get tired more easily than I used to
    c. I get tired from doing anything
    d. I get too tired to do anything

41. a. My appetite is no worse than usual
    b. My appetite is not as good as it used to be
    c. My appetite is much worse now
    d. I have no appetite at all any more

42. a. I haven't lost much weight, if any, lately
    b. I have lost more than 5 pounds
    c. I have lost more than 10 pounds
    d. I have lost more than 15 pounds

43. a. I am no more concerned about my health than usual
    b. I am concerned about aches and pains or upset stomach or constipation or other unpleasant feelings in my body
    c. I am so concerned with how I feel or what I feel that it's hard to think of much else
    d. I am completely absorbed in what I feel

44. a. I have not noticed any recent change in my interest in sex
    b. I am less interested in sex than I used to be
    c. I am much less interested in sex now
    d. I have lost interest in sex completely

Source--Part II Depression Inventory from
Beck, A.T.; Ward, C.H.; Mendelson, M.; Mock, J.; and Erbaugh, J. "An Inventory for Measuring Depression." Archives of General Psychiatry 4(June 1961): 561-571.

APPENDIX B

PERMISSION FOR THE STUDY

TEXAS WOMAN'S UNIVERSITY

Human Research Committee

Name of Investigator: Diane Gerulis Center: Denton

Address: 4104 Ramsey Ave. Date: 5-11-78

Austin, Texas 78756

Dear Ms. Gerulis:

Your study entitled A Description of Depression Levels of Vietnam Veterans and Non-veterans has been reviewed by a committee of the Human Research Review Committee and it appears to meet our requirements in regard to protection of the individual's rights.

Please be reminded that both the University and the Department of Health, Education and Welfare regulations require that written consents must be obtained from all human subjects in your studies. These forms must be kept on file by you.

Furthermore, should your project change, another review by [illegible] is required, according to DHEW regulations.

Sincerely,

C. K. Rozier

Chairman, Human Research Review Committee at Denton.

cc: Graduate Office

APPENDIX C

RESUME OF ORAL DESCRIPTION OF THE STUDY

RESUME OF ORAL DESCRIPTION OF THE STUDY

"Hello. I am Diane Gerulis. I am a graduate nursing student from Texas Woman's University. I am conducting a research study concerned with the level of depression experienced by males. Specifically, I am interested in determining whether or not the Vietnam War experience significantly affects an individual's level of depression.

Participation in this study requires that you complete a questionnaire which is divided into two parts. The first part of the questionnaire relates to personal data such as your age, marital status, socio-economic status, and military experience. It will also include questions concerning your experience in Vietnam such as length of tour of duty, type of combat, convictions about the war, and physical wounds sustained during combat. Questions will also be asked regarding psychiatric services you may have received. The second part of the questionnaire is a Depression Inventory which will ask questions concerning your level of depression. This part will require that you evaluate and recall feelings you have about yourself and your attitude toward life. You will be asked about your sense of personal achievement or failure, your mood, your interest in other people, your interest in sex, and possible thoughts you may have of harming or punishing yourself.

Remembering Vietnam experiences and evaluating yourself in regard to symptoms of depression may cause you to become uncomfortable or anxious. If you think that you might experience an uncomfortable amount of anxiety or embarrassment by answering the questionnaire, do not volunteer to participate. Weigh this decision carefully.

If you decide to participate in this research study, you will have the opportunity to become more aware of yourself by evaluating your own level of depression. Also, the results of this study will be reported in my thesis. A copy will be available at the Texas Woman's University, Temple Center Library, should you wish to see the results.

I will maintain complete confidentiality. Your name will never be asked nor will you be asked to give your name or other identifying information such as your address or telephone number on the questionnaire. The information received from the questionnaire will be used for research purposes only. If you do not wish to reveal information about yourself in the areas mentioned, please do not participate. Participation in this study is strictly voluntary.

Should you experience any undue discomfort or anxiety, or wish to stop participating in this study for any reason, please withdraw and destroy your questionnaire. If you find that you are experiencing undue distress, discomfort, or anxiety and wish to receive counseling, an appropriate referral will be made for you by this investigator upon request.

Do you have any questions? Do you wish to participate in this study? If you have decided to participate in this study, please sign this form which gives your consent to participate (Form B)."

APPENDIX D

SUBJECT CONSENT FORM

TEXAS WOMAN'S UNIVERSITY

Consent to Act as a Subject for Research and Investigation:

I have received an oral description of this study, including a fair explanation of the procedures and their purpose, any associated discomforts or risks, and a description of the possible benefits. An offer has been made to me to answer all questions about the study. I understand that my name will not be used in any release of the data and that I am free to withdraw at any time.

_____

Signature Date

_____

Witness Date

Certification by Person Explaining the Study:

This is to certify that I have fully informed and and explained to the above named person a description of the listed elements of informed consent.

_____

Signature Date

_____

Position