MMPI Characteristics of Vietnam Combat Veterans Diagnosed as Post-Traumatic Stress Disorder Requesting Outpatient Mental Health Counseling

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MMPI CHARACTERISTICS OF VIETNAM COMBAT VETERANS DIAGNOSED AS POST-TRAUMATIC STRESS DISORDER REQUESTING OUTPATIENT MENTAL HEALTH COUNSELING

by

Thomas M. Spahn

Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Education
Department of Counseling and Personnel

Western Michigan University
Kalamazoo, Michigan
April 1985
Throughout the history of warfare, the most difficult casualty to identify has been the emotionally wounded. Although policy changes were made to reduce the effects of psychiatric casualties, a number of Vietnam combat veterans continue to experience Post-Traumatic Stress Disorder (PTSD).

The purpose of this research was to survey the emotional conflicts of Vietnam combat veterans who were diagnosed as experiencing Post-Traumatic Stress Disorder. Subjects (n=28) were voluntary outpatient clients of a V.A. Mental Health clinic who were free of psychiatric, substance abuse, or organic problems. The Minnesota Multiphasic Personality Inventory (MMPI) was used, and analyses included the clinical and research scales, Harris-Lingoes subscales, Wiggins content scales and the Koss-Butcher critical items.

Three research questions addressed: (a) the presence of psychopathology as indicated by the sample's MMPI profile, (b) the dynamics inferred from the MMPI profile, (c) and the data's implications for treatment.

Comparison of the MMPI mean sample profile with other PTSD sample profiles supported the profile's validity. A significant level of psychopathology was indicated by the elevation of six of the ten MMPI
clinical scales. The dynamics inferred from the profile included: depression, despondency, pessimism, confused thinking, poor memory, and difficulties with concentration. Subscale analysis indicted which dimension of the clinical scale contributed to the clinical scale elevation. Contributors to the clinical scale elevation were often different from those generally assumed from the clinical scale elevation, or the misperceptions of Post-Traumatic Stress Disorder veterans.

The MMPI data's implications for treatment of PTSD involved: (a) the recognition of significant psychological pain, (b) traumatic stressor's impact upon the veteran's adjustment, (c) the trauma-based obstacles to a therapeutic relationship, (d) the severity of repressed affect, and (e) the veteran's resiliency.
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Western Michigan University

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CHAPTER I

THE PROBLEM AND ITS BACKGROUND

Background of the Problem

The most difficult casualty to identify throughout the history of warfare has been the emotionally wounded. "Shell shock," "battle fatigue," and "combat neurosis" are terms which have been used to describe a collection of symptoms that arose from prolonged exposure to the traumatic stress of warfare. The nosological term used in the present Diagnostic and Statistical Manual of Mental Disorders (DSM III) is Post-Traumatic Stress Disorder (PTSD) (American Psychiatric Association, 1980). The number of psychiatric casualties, defined in terms of the loss of 24 hours or more of duty due to psychiatric reasons, varied from 28 to 101 per thousand in W.W. II, averaged 38 per thousand in Korea and were reduced to 12 per thousand in Vietnam (Colback & Parrish, 1970). Dramatic policy changes were implemented prior to and during the Vietnam war to reduce the deleterious effect of psychiatric casualties upon manpower and morale. The actual reduction in the number of psychiatric casualties during the Vietnam War led to initial optimism:

With the advent of the Vietnam 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 G.I. would be considerable. However, the most significant psychiatric finding of the conflict has been that the number of casualties has remained surprising low. (Bourne, 1970a, p. vii)
Peter Bourne (1970c), considered an authority on combat related stress, wrote that the Vietnam conflict enhanced an understanding of the impact combat had upon psychological functioning. The major correlates of psychiatric attrition were thought to have been identified. These influenced policy decisions during the war which were thought to have increased the adaptive capacity of the average soldier during combat. Only under the extreme circumstances of excessive combat or fatigue was a healthy individual expected to become a psychiatric casualty. If this occurred, the provision of prompt psychiatric treatment would have returned the soldier to his previous capacity. Psychiatric attrition was expected to be found only in soldiers who brought psychological liabilities to the combat zone. It was further professed that with present knowledge of combat psychology, adequate vigilance and intervention, psychiatric casualties need never again become a major cause of attrition in a U.S. military zone.

Initial research on repatriated Vietnam P.O.W.'s did not observe the pervasive "survivor syndrome" found in W.W. II concentration camp survivors. P.O.W.'s were thought to have experienced the most severe stress of the war and their resilience was said to have been a testimony to the positive effect of improved military training and personnel (Ursana, Badstun & Wheatly, 1981). The incidence of psychiatric illness, however, found in a five year follow-up of P.O.W.'s was highly correlated with the sociodemographic variables of severity of stress, age and rank. These findings brought into question the commonly held belief of a personality predisposition and placed a stronger emphasis upon the
effect of catastrophic, warfare-related stress had upon a combat stress reaction. This information associated with the youthful age of the average Vietnam combat soldier and the special nature of the war led to the speculation that a delayed syndrome might occur (Singer, 1981).

Horowitz and Soloman (1975) reviewed the research on major stress syndromes during W.W.II and Korea. The custom during these wars was to retain personnel in combat zones for long periods of time. It was found that the incidence of psychiatric casualties increased in direct proportion to the length of stay within the high combat areas. As a result, Grinker and Spiegel, cited in Horowitz and Soloman (1975), predicted that 50% of high combat air crews might develop severe symptoms of combat stress. Similar findings were cited by Horowitz and Soloman (1975) from Lewis and Engel for ground troops. Symptoms of intrusive thoughts, denial and psychic numbing were grouped under the term "combat neurosis."

Horowitz and Soloman (1975) speculated that the special facets of the Vietnam war might precipitate a delayed stress response that would hinder the stressed veteran from readjusting to civilian life and in seeking help. The features unique to the Vietnam conflict of short intense combat, frequent duty rotations, lack of unit identity, frequent opposition to military direction, civilian resistance, vague purpose, limited observable accomplishment, lack of social support and drug and alcohol availability were expected to foster mistrust and anger at government or social services. The stressed veteran was expected to deny and avoid his pain as well as resort frequently to substance abuse.
as a means of self-medication. If assistance was sought, denial, anger, mistrust and psychic numbing would be major obstacles to effective assessment and intervention.

Bourne, within his introduction to Figley (1978), altered his initial optimism in accordance with the changes that occurred in the mid and late stages of the Vietnam conflict. The psychiatric casualty rates during the early stage of the conflict did not exceed the incidence found in stateside forces. The initial positive influence of the one year tour, however, had become a double-edged sword. It allowed the soldier who experienced a stress reaction to endure until his return home with a hope that his return would resolve his discord. The disorder would have been expected to emerge only if the soldier had remained in Vietnam beyond a one year tour. The shortened tour allowed numerous veterans who were experiencing an acute stress disorder or were on the threshold of a stress disorder to remain undetected and discharged from active duty. The initially-perceived impairment-free participant thus became a post-Vietnam casualty, often unrecorded by military medical personnel. The return home during the socio/political turmoil of the era often did not resolve the discord but exacerbated the psychological conflict that precipitated an emotional disorder.

Additional skepticism arose from studies by scientists who studied individual's reaction to severe environmental stress associated with natural disasters. Victims of the Buffalo Creek flood disaster, Los Angeles Supper Club fire, Nazi holocaust, Hiroshima and violent crime, exhibited depression, anxiety, emotional constriction, sleep disturbance,
recollective nightmares, survival guilt, loss of interest in past meaningful activities, emotional numbness and fear of intimacy (Wilson, 1980).

Each victim's particular symptomatology reflected the specific nature of the traumatic event. Individuals thought to have experienced a post-traumatic reaction to their Vietnam combat experiences reflected the special nature of the war. These symptoms included: hostility, mistrust of authority, aggressive combat-like behaviors, fantasies of retaliation, flashbacks to combat, survival guilt and self-imposed alienation. Specific facets of the Vietnam war associated with the symptomatology were guerrilla warfare, longevity, frustration, indigenous revolutionary forces, political controversy, highly destructive technology, defoliants, lack of geographical advancement, recognition of "body count" as a measure of success, morale and racial problems, drug availability and survivor mentality (Wilson, 1980).

The suspected emotional and readjustment problems experienced by many combat veterans began to gain recognition as additional social research was undertaken. Fifty-five thousand veterans were killed; 303,000 were wounded, 42,000 were disabled; and 35,000 widows and orphans were created. The U.S. Public Health Service estimated that 500,000 Vietnam veterans were alcoholic and their rates of suicide, unemployment and hospitalization were significantly higher than for nonveteran counterparts. The rates of separation, divorce and incarcerations for violent crimes were found to be higher than the norm (President's Commission on Mental Health, 1978). Those initially thought to be free from experiencing marked symptomatology during readjustment
were later found to be experiencing considerable discomfort and complications.

At the subclinical level then—the level of mental health problems which are not readily visible to the caring professions and which do not surface in the statistical reports—there are signs of negativism, distrust, and loss of morale and self esteem which debilitate veterans. They work just as surely at undermining the returnee's transition to civilian life as do the conditions of gross maladjustment and drug abuse. Reliable surveys conducted by the Veteran's Administration indicate that serious and prolonged readjustment problems exist in approximately one out of five veterans and that, to a lesser degree, they are experienced by all. (President's Commission on Mental Health, 1978, p. 1338)

The Center for Policy Research study (1981) was the most extensive epidemiological survey to date concerning the adjustment of the Vietnam veteran. The study found that one-quarter of Vietnam veterans, primarily noncombat participants, thought the war had little effect upon them, while heavy combat veterans thought their experience had a profound deleterious effect. Additional findings included: Only six of ten Vietnam combat veterans supported the war effort; Vietnam "campaign" veterans were three times as likely to develop readjustment problems as Vietnam "era" vets; and one-third of combat veterans were thought to be severely stressed.

Statement of the Problem

Impetus for this research was found in a disagreement within the literature concerning the presence and nature of a possible stress disorder related to Vietnam combat veteran's service duty. Additional impetus arose from personal clinical experience within which the Vietnam veteran's concerns were often viewed with skepticism by the mental
health community. This skepticism generally resulted in a veteran, personally considered to be experiencing considerable pain and amenable to treatment, to leave care and remain victimized by a stress disorder. The Vietnam veteran's emotional discord was personally thought to be frequently misconstrued if the veteran became involved in the mental health system. The rejection from care or the misassessment during care was thought to parallel the psycho/social dynamic that fostered alienation upon the veteran's return to the United States after the Vietnam war. This alienation was a major obstacle to readjustment and appeared to be duplicated by the health care system dedicated to the veteran's care. The problem addressed by this research was the presence and extent of affective pain Vietnam combat veterans diagnosed as Post-Traumatic Stress Disorder presented to an outpatient mental health clinic upon seeking voluntary psychological services. A second problem addressed in the research was the particular dynamics of the Post-Traumatic Stress Disorder. The recognition of the dynamics of the disorder was expected to provide clues for effective remediative action.

The purpose of this research was to assess, using the Minnesota Multiphasic Personality Inventory (MMPI), the extent and nature of the psychological problems manifested by Vietnam combat veterans who were diagnosed as Post-Traumatic Stress Disorder. All veterans sampled were voluntary outpatient mental health clients who expressed a personal recognition of emotional conflict. Emphasis was placed upon veterans who sought outpatient mental health services as an indication of personal recognition of emotional conflict through a voluntary request for
assistance. Subjects free of past psychiatric hospitalizations, marked social maladjustment or substance abuse were used. These Vietnam combat veterans experienced sufficient emotional discord to justify a diagnosis of Post-Traumatic Stress Disorder while maintaining a fair level of social adjustment. This population was thought to represent the dynamics of Post-Traumatic Stress Disorder without the complexities of a level of emotional decompensation that precipitated hospitalization for psychiatric or substance abuse disorders. The MMPI characteristics of veterans who experienced Post-Traumatic Stress Disorder within an inpatient psychiatric or substance abuse setting have been explored; while no reference to Post-Traumatic Stress Disorder veterans who sought outpatient mental health services has been found (Penk, Robinson, Roberts, Patterson, Dolan & Atkins, 1981; Roberts, Penk, Robins, Dolan, Gearing & Patterson, 1982; Foy, Sipprelle, Rueger & Carroll, 1984; Fairbank, Keane & Malloy, in press; Keane, Caddell, Martin, Zimmering & Fairbank, in press).

The above studies that used the MMPI generally confined their analysis to the validity, clinical and research scales. A goal of this study was to expand the utilization of the MMPI beyond the above scales to include the use of the Harris-Lingoes subscales, Wiggins content scales and the Koss-Butcher critical items. This method attempted to assess the particular dynamics of the clinical scales that precipitated an elevation. The method also provided more comprehensive data concerning common symptomatology, personality dynamics, life adjustment problems, and the relevance of DSM III diagnostic criteria.
The second intent of this survey was to venture beyond the clinical issue of the presence and nature of psychopathology indicated by the MMPI profile to the varied characteristics, dimensions, and problem areas contained within the supplemental scales as utilized by Graham (1977). The assessment of the collected profiles obtained from the sampled outpatient PTSD clients was established in accordance with accepted references such as Welsh & Dahlstrom (1975), Marks, Seeman & Haller (1974), Graham (1977) and Duckworth (1979). Emphasis was placed upon qualifying the assessment with regard to the population tested and their traumatic histories. Information was sought regarding the veterans' test taking attitude, the manner in which they reported themselves to be experiencing psychological pain, their symptomatology, their behavioral problems, their social adjustment and their personal dynamics. This psychological assessment was considered to be a valuable contribution to the body of knowledge applicable to treatment and program planning for the combat veteran experiencing PTSD and requesting outpatient mental health services.

Limitations of the Study

The first limitation of this study was a function of its descriptive/survey design. Descriptive research, as described by Simon (1969), seeks a general understanding of the research area, provides clues for future research and must limit its observations to the specific area of inquiry. The design strategy of this study has limited status as rigorous or scientific means of empirical inquiry. The design's lack of statistical conclusive validity, as defined by Cook and Campbell (1979),
significantly limited the study's ability to measure the relationship between the diagnosis of PTSD and the MMPI characteristics, to establish the relationship as causal, to discover the particular cause effect construct of the relationship, and to generalize the findings to other populations.

A second limitation of the study was the absence of a control group for comparison. The lack of normative data diminished this study's ability to establish a direct relationship between the obtained results and the presence or absence of PTSD. The profiles, symptomatology, problems, dynamics and coping styles were a possible result of experiencing sufficient psychological pain to seek outpatient mental health care or other factors. MMPI profiles obtained from the varied diagnostic categories of Vietnam combat veterans who sought outpatient mental health services and were not experiencing PTSD would have provided indications of the uniqueness of the diagnostic category and related characteristics. Adequate samples of Vietnam combat veterans of varied diagnostic categories were not available in adequate numbers and were beyond the limits and purpose of this study. If a sample of all Vietnam veterans who sought assistance was collected, the sample might be subject to the same influence of confounding variables as was experienced by Penk et al. (1981). The limited significant differences found in their study of the psychological characteristics of PTSD and non-PTSD Vietnam veterans who were seeking inpatient substance abuse services were thought to have been a function of the confounding effect of both inpatient status and substance abuse. The inherent normative data of
the MMPI was used with an emphasis not upon the mutual exclusivity of
diagnosis, but upon the presence and nature of the psychological pain
experienced by veterans diagnosed as experiencing PTSD.

A third limitation of this study was the absence of a randomized
sample that could have been considered representative of the universal
population of combat veterans experiencing PTSD who sought outpatient
mental health services. The sample collected had an inherent bias as
it consisted of combat veterans who sought outpatient mental health
care at a particular clinic during a specific period of time. This
sample was expected to reflect the particular geographical, socio-
demographic and cultural influences of the setting and may not have
been representative of the total population. The sample was biased in
that it represented veterans who sought voluntary outpatient mental
health services at a specific location and was not inherently pre-
sentative of veterans who requested or were directed to alternative
outpatient or inpatient services. The characteristics of psychiatric,
forensic or substance abuse inpatients or outpatients were not repre-
sented and generalizations to these populations must be cautious.

A fourth limitation may be inherent in the fact that selection of
the sample was based on the clinical judgments made by a multisdis-
ciplinary mental health team using DSM III diagnostic criteria. Factors
such as the often multicausal influences of nervous disorders, similar
symptomatology between Post-Traumatic Stress Disorders and other dis-
orders, the differential capability of the diagnostic criteria, as well
as the capability and attitudes of the diagnostic team may have in-
fluenced the diagnosis and subsequent inclusion of the veteran in the
sample. Descriptions of PTSD symptomatology were largely subjective in nature, based upon self-report; and the presence of a catastrophic stressor was generally not verifiable. These limits, however, were inherent in all PTSD diagnostic decisions for patients assessed in the delayed or chronic stages of the disorder.

A fifth limitation of the study was the observational and interpretive bias created by the assessment of the MMPI sample profile and additional scales in reference to post-traumatic symptomatology and dynamics. The validity of such an assessment was as dependent upon the validity and accuracy of the instrument in respect to this population as upon the post-traumatic oriented interpretation. The reader needs to keep in mind that one of the intents of the research was to explore the applicability of the MMPI in obtaining appropriate information from veterans who sought mental health care. The collected information, as intended in appropriate use of the MMPI, must be interpreted not as a diagnostic finalization but as a valuable source of inferences, probabilities and constructs, each of which must be confirmed or supported by other tests, and/or observational, historical and experiential data. Appropriate use of the test is to provide information and generate hypotheses that are confirmed by the subject or other instruments. The test is not meant to be a vehicle for diagnostic finalization (Graham 1977; Dahlstrom, Welsh & Dahlstrom, 1972; Duckworth, 1979).

A final limitation thought to be present within this study was the applicability of the Harris-Lingoes subscales, Wiggins content scales and the Koss-Butcher critical items. The original clinical scales of
the MMPI were developed through empirical keying procedures, and items were utilized that significantly differentiated between external criterion groups. These have been frequently utilized in research with accepted validity (Dahlstrom et al., 1975). The Harris-Lingoes or Wiggins scales resulted from the logical or homogeneous keying approaches. The logical keying method grouped items together that were judged, on the basis of their content, to assess a specialized trait or characteristic. The homogeneous method was based upon the administration of a set of heterogeneous items with the responses intercorrelated. The intercorrelated matrix was factor analyzed with the emerging factors being considered relevant dimensions measured by the inventory. These scales were meant to be supplemental and not a substitute for the standard scales (Graham, 1977). The use of these scales within the proposed study was meant to be consistent with the standard clinical use of the additional scales; that is, a source for supplemental information but cautiously utilized for diagnostic or differential purposes.

Significance of the Study

Recommendations for further assessment of PTSD and for the provision of appropriate remediative interventions have come from numerous sources. The goal of this study was to add to the growing body of literature concerning the adjustment problems, needs, and means of reacting to combat veterans experiencing a stress disorder. The President's Commission on Mental Health (1978) dedicated a chapter to the mental health problems of Vietnam veterans. Although the number of
neuropsychiatric diagnoses during the Vietnam war was found to be lower than for previous conflicts, the actual number of delayed mental and emotional disorders was significantly higher. A notable finding was the persistence of the delayed or chronic disorders which arose after the soldier had returned home. The total number of physical and emotional casualties of the Vietnam war experienced by combat veterans, members of their immediate families and significant relationships was expected to exceed 25 million. This population and their life adjustment problems were thought to present an acute and largely unmet national need for mental health, rehabilitative and social services. Federal policy was decreed as shortsighted, and a call was made to remedy the present deficits in the fund of knowledge regarding the causes, manifestations and effects of delayed war-related mental health problems. The first step of planning appropriate therapeutic or programatic interventions is the collection of input information. This study was thought to add to the information concerning what PTSD veterans and their families requested, verbally and through psychometric instruments, from an outpatient mental health clinic.

Laufler, Yager, Frey-Wouters, Donnellan, Gallops & Starbeck (1981) stated that although the majority of Vietnam veterans did not believe the war had a long term negative impact upon their personal development, it was clear that the impact of combat and exposure to death was profound. The veterans who felt the least effect had the least exposure to combat while 29.6% of the heavy combat veterans felt the war had a distinct negative psychological impact upon their lives. Common
complaints of those negatively affected by their Vietnam war experience included being traumatized by death, disorientation and loss of support from the military, confusion, alienation, insecurity, guilt and medical problems and concerns. One of the strongest feelings was alienation. The positive, remediative impact of returning to a supportive family and social support system was clearly evident.

Kadushin, Boulanger and Martin's survey (1981) found that one third of the total number of heavy combat veterans and 70 percent of black heavy combat veterans were severely stressed. The positive effect of a stable family in the pre and post combat periods was again supported. Men from stable family backgrounds were likely to develop stress in response to exposure to extreme combat stress, while men from unstable family backgrounds might have developed stress reactions to even daily life stressors. The presence of a stable marital or supportive social environment often found in the smaller rural areas was found to be significant in reducing the impact of delayed stress.

Wilson, Smith and Johnson (1983) compared post traumatic stress syndrome in victims of nine different stress events including Vietnam combat veterans. Their analysis supported the hypothesis that bereavement and life-threat were variables which were linked to the mechanism which influenced the severity of the post-traumatic symptomatology. It was further hypothesized that Vietnam combat veterans who were exposed to a high level of threat to life and who experienced the loss of significant others would score high on the assessment scales. The Vietnam combat veterans scored significantly higher than victims of
other traumatic events on scales measuring depression and intrusive thoughts. The men appeared depressed, were troubled by intrusive imagery, felt stigmatized, lacked stable intimate relationships and were prone to physical symptoms. Figley (1979) also focussed upon the Vietnam combat veteran as a survivor who often experienced symptoms similar to those experienced by survivors of other traumas. The survivor was observed to progress through predictable stages of readjustment if the appropriate supportive environment or assistance were present.

Lipkin, Blank, Parson and Smith (1982) described the varied symptomatology presented by combat veterans who experienced PTSD. These problem areas included: psychological symptoms, alterations in life course, relationships to significant others and concepts of self and reality. These authors, who are accepted authorities in the area of PTSD and hold prominent policy-making positions within the Veteran's Administration, related the numerous challenges they experienced from professional colleagues who have insisted they have never seen a clinical example of the disorder among veterans they treat. The social turmoil of the war, the often aggressive or detached appearance of the afflicted veteran and the painful therapeutic process were thought to have resulted in the avoidance of the disorder. Yet:

Posttraumatic stress disorder among Vietnam veterans can be viewed as the result of a profound assault in which severe psychic stress is added to a set of conditions that impair or delay the ability of the individual to proceed with the ongoing tasks of adult development. Both the developmental suspension and the direct stresses pose a major challenge to the adaptability and resources of these veterans and of the mental health professionals who encounter them. (Lipkin, et al., p. 912)
The significance of this research was to survey combat veterans concerning the extent to which they manifest the aforementioned symptomatology, indicative of continued traumatization by a stress disorder, upon requesting care. If the disorder was present, information was sought concerning the psycho/social dynamics that might have inhibited the disorder's resolution. Information concerning a painful emotional disorder was thought to be inconsequential without implications for remediation. The collected data's impact upon treatment recommendations was thought to be the study's primary significance.

The significance of the aforementioned diverse epidemiological data, individualized symptomatology and conflict was further accentuated by the frequent differential diagnostic problems presented by individuals who experienced PTSD (Baskett & Henager, 1983; Sparr & Pankratz, 1983; Bowman, 1982; Lacoursiere, Godfrey & Ruby, 1980). This confusion was further compounded by the frequent reluctance by the mental health professional to inquire and assess beneath the depressed or angry facade often present in a PTSD disorder. Horowitz and Solomon (1975) predicted a latent, delayed stress response by the Vietnam veterans that would be difficult to recognize and treat. The latent manifestation of symptoms was expected to have interfered with personal awareness of their traumatic origin. Symptomatic fear, anger, guilt and suspiciousness were expected to interfere with the therapeutic trust necessary to explore the conflict laden areas. The fear of losing inhibitory control which derived from the veteran's historical combat experience was suspected to pose a major obstacle to the common therapeutic goal of easing suspected neurotic inhibitory mechanisms. If the veteran's
inhibition of expression was not understood and productively responded to by the therapist, it was feared that their psychic numbness or depression might become even more entrenched. The often heightened sense of pride in physical and emotional resilience inculcated during military training would come in conflict with the veteran's immediate sense of shame. Threat or guilt was also expected to solidify the barrier between the veteran's internal painful experience and external expression.

Koss' (1983) description of the clinical implications for the treatment of rape victims also stressed the necessity of a high level of clinical acumen as the latent facets and overt symptomatology of PTSD often obscured the core sexual abuse issue. The recognition and working through of the sexual abuse victimization experience was thought to be the core of an effective therapeutic process. The deceptiveness of presenting symptomatology made it extremely difficult but essential to accomplish a productive therapeutic relationship, accurate problem assessment and therapeutic resolution.

Domash and Sparr (1982) discussed the case of a 30 year old veteran who was misdiagnosed. The initial presence of psychotic-like symptomatology was easily misconstrued as a schizophrenic process. Initial misdiagnosis led to failure of initial treatment while a subsequent assessment and intervention consistent with PTSD theory proved beneficial. Condit (1982) researched the character pathology of Vietnam era veterans and found that the symptomatology manifested by post-1967 combat veterans was more characterologically disturbed than that of
non-combat or pre-1967 veterans. These results were not found to be significantly different from other studies and were thought to support the unique characteriological-like symptomatology of Vietnam combat veterans as well as the tendency among mental health professionals to misinterpret Vietnam symptomatology. Theoretically, the misinterpretation of the symptomatology inhibited the recognition and therapeutic abrusion of the traumatic stress. Misdirected therapeutic experience reinforced the victim's continued repression of the painful affect that engendered and maintained the problematic symptomatology and interpersonal maladjustment.

The above research reinforced the significance of this study. The presence of a significant mental health issue was professed to exist in the case of Vietnam combat veterans experiencing PTSD. The manifested symptomatology often obscured the true traumatic core of the disorder. The behavioral manifestations of detachment, alienation, suspiciousness, hostility and substance abuse were often misconstrued by professionals which resulted in a lack or misdirection during intervention. The research supported the need for a specialized form of assessment in view of the victim's ambivalence about seeking assistance. The victim felt considerable pain and typically experienced social maladjustment yet feared the awareness of traumatic affect associated with therapeutic exploration of the traumatic event.

The significance of this study resided in its goal of surveying the degree and nature of psychological pain reported by Vietnam combat veterans requesting outpatient mental health services. The survey
information was expected to improve understanding that the disorder does exist, represents a significant emotional disorder that mandates a therapeutic response, yet is difficult to identify and treat. The purpose of the proposed research was to survey a sample of combat veterans assessed as experiencing PTSD in respect to how they reported themselves to be experiencing PTSD. This survey included the level of psychopathology and affective pain experienced, common symptomatology, adjustment problems and intra and interpersonal dynamics that maintained and inhibited remediation of PTSD. Special emphasis was placed upon the dynamics that reinforced the presence or absence of the recognized healing resources of supportive social support systems. This information obtained from a sample less confounded by acute psychiatric or substance abuse factors was thought to be valuable in its application to assessment, therapeutic direction and program development.

Research Questions

The initial research question of this study was: "Do Vietnam combat veterans diagnosed as suffering from PTSD exhibit a significant level of psychopathology?" The presence and degree of psychopathology was measured by a MMPI profile that consisted of mean sample T scores. The profile was assessed according to standard means of MMPI interpretation with special consideration given to the traumatic origin of the disorder. The MMPI was selected due to its standardization, frequent use in recent research on PTSD, accepted validity and intrinsic normative data.

A second research question was: "What are the particular psychological dynamics of PTSD that were indicated by the sample profile?"
Psychological dynamics were assessed by the use of the validity, clinical, research, Harris-Lingoes, Wiggins content scales and the Koss-Butcher critical items. The assessment process followed the frequently used interpretive strategy described by Graham (1977) and Duckworth (1979). The assessment strategy was not to differentially categorize PTSD profiles but to derive meaningful inferences from the standardized observations of the subject's current psychological profiles.

Graham (1977) sought to answer several questions within his interpretive strategy. The test-taking attitude of the examinee and its effect upon the protocol's interpretation was explored. A second area was the general level of personal adjustment indicated by the MMPI protocol. The kinds of behaviors, symptoms, attitudes, and defenses that can be expected from the examinee was sought. The etiology or set of psychological dynamics that underlie the behavior was questioned. The most likely diagnostic label and the implications for treatment were final concerns. As previously noted, the protocol must be interpreted in light of additional social and observational data. The unique nature of a combat veteran's traumatic experience that has been judged to have had a definite impact upon their present emotional discord was a strong focus on the final assessment.

A final research question focussed upon: "What were the collected data's implications for treatment recommendations." Research about PTSD cases previously cited has stressed the hidden nature of the core problems of PTSD, the victim's repressed anger, alienation and lack of supportive interpersonal relationships. This study sought to clarify,
by means of the MMPI, the dynamics which underlie the PTSD victim's problems and to suggest effective interventions. Personal clinical experience with the MMPI as a diagnostic and therapeutic tool has proven the instrument to be quite beneficial as a means of collecting inferences about the combat veteran.

Overview of the Study

The psychiatric casualties have constituted a significant acute and chronic cost of combat throughout the history of warfare. Significant policy changes were made prior to and during the Vietnam conflict in an attempt to diminish the number and severity of psychiatric casualties. The initial data reporting a significant reduction in psychiatric casualties during Vietnam led to optimism. Several social scientists who studied the emotional and behavior reactions to combat and other forms of natural disasters were skeptical and speculated that a long term delayed syndrome might constitute a significant problem both for the veteran and for those he encountered. Large epidemiological studies concerning combat veterans' level of readjustment presented evidence of significant problems both in terms of numbers afflicted and severity of impact. The purpose of this research was to survey the emotional conflicts, areas of maladjustment, and personal dynamics that combat veterans diagnosed as suffering from PTSD presented to an Outpatient Mental Health Clinic. MMPI protocols obtained through routine psychological assessments were the primary source of information.

Several limitations were present in the research design. The survey nature of the research limited the degree of statistical
conclusive validity. The lack of a control group and a randomized sample limited the study's ability to generalize the results to the overall population. Sample selection was dependent upon utilization of a multidisciplinary diagnostic team's use of DSM III criteria. Due to the chronic or delayed nature of the PTSD disorder, the diagnosis was dependent upon the subjective, non-verifiable historical data necessitated by the chronic or delayed condition. The final assessment of the MMPI data was also influenced by the researcher's bias in favor of PTSD theory.

The significance of the study was enhanced by the need for accurate assessment to guide effective remediative efforts for PTSD. The disorder was often disguised and misinterpreted. The dynamics of PTSD often interfered with the maintenance of a healing supportive social support system or successful engagement in a therapeutic process. This survey information obtained from voluntary clients seeking outpatient mental health services was expected to be an asset in understanding common symptomatology, level of psychopathology, social adjustment and interpersonal dynamics. Such information was considered valuable for program, training and therapeutic strategy.

The second chapter focused upon the professional literature concerning PTSD. The major epidemiological studies were reviewed. Several authors have completed comprehensive reviews of significant research and these were surveyed. A final area of review was the research focused upon the MMPI characteristics of combat veterans and those diagnosed as PTSD. The third chapter described the survey
research design and specified the sample, operational definitions, operational hypothesis, means of data collection and means of data analysis. The fourth chapter described and summarized the collected data. The final chapter's purpose was the discussion of the research questions. The initial question assessed the presence or absence of psychopathology reported by the surveyed sample as indicated within the MMPI protocols. The second question was the specific dynamics inferred from the collected MMPI profiles. A final area of discussion was the data's implication for program and treatment strategy. The basic purpose of the research was a quest for information concerning the psychological and social problems reported by Vietnam veterans experiencing PTSD upon their voluntary request for outpatient mental health services. This information was thought to be a valuable asset in the planning and provision of appropriate care for the veteran experiencing Post-Traumatic Stress Disorder.
CHAPTER II

REVIEW OF THE LITERATURE

Research concerning soldiers' reactions to combat has been discussed from psychoanalytical, demographic, sociological, psychological and medical viewpoints. Early writings were influenced by Freudian thought and were reviewed in the first section of this chapter. Writings immediately following the Vietnam war presented a dispute between those who thought a stress reaction was transitory and reflected soldiers' predispositional characteristics and those who thought a long term stress reaction remained for many combat veterans and was related primarily to a soldier's combat experience. This research was contained in the section of Figley's (1978a) review of the research prior to 1978. Demographic data was collected by President Carter's Commission on Mental Health (1978) and was reviewed in the section concerning the Commission's report on mental health. The varied themes that emerged from the most recent writings concerning PTSD were reviewed by Egendorf (1982) and presented in the section on recent research. The final section of this chapter was concerned with the recent research concerning PTSD that used the MMPI.

Pre-Vietnam Research

Cavenar and Spaulding (1976) reviewed the literature related to combat stress reactions prior to the Vietnam war. The topic had been a subject of controversy throughout history. Hammond, cited in Cavenar
and Spaulding (1976), wrote concerning combat reaction during the United States Civil War while Salmon, cited in Cavenar and Spaulding (1976), offered observations and recommendations for treatment of combat reactions subsequent to W.W.I. Freud (1968) offered several observations concerning the traumatic stress of combat.

We apply the word "traumatic" to an experience which within a short period of time presents the mind with an increase in stimulus too powerful to be dealt with or worked off in a normal way, and thus must result in permanent disturbances of the manner in which the energy operates. (cited in Cavenar & Spaulding, 1976, p. 8)

Freud suggested that the intensity of the traumatic experience broke down the stimulus barrier and overwhelmed the victim. He thought that the person attempted to overcome the situation through compulsive repetition. Freud professed that combat could cause neurosis in a normal person or present neurotic symptoms in a previously asymptomatic person.

Grinker, cited in Cavenar and Spaulding (1976) completed the most comprehensive study of traumatic war neurosis resulting from W.W.II. He thought that the symptoms of war neurosis were varied and could consist of restlessness, irritability, lethargy, insomnia, recurrent battle or trauma dreams, loss of weight, signs of sympathetic overactivity, alcoholism, startle reactions, anxiety, depression, anorexia, gastrointestinal problems, aggressive/hostile behavior, paranoid reactions and mental confusion. Grinker agreed with Freud that a normal person or one who experienced pre-trauma neurosis could develop a war related neurosis.
Research Prior to 1978

Figley (1978a) dedicated a chapter to a review of the available research on stress disorders among Vietnam combat veterans authored prior to 1978. His focus was upon the post military psychological adjustment of Vietnam veterans. Psychosocial adjustment was defined as a state of general emotional well-being, satisfaction and relative comfort with other people as well as oneself. This perspective attempted to include both the interpersonal and the intrapersonal realms. The following summary has been based upon Figley's review.

Demographic information was summarized in Lieberman's review, cited by Figley (1978a), of official government records. By the end of 1970, the Veteran's Administration had attributed 18,000 widows and 12,000 orphans to deaths in Vietnam. By 1969, 40 percent of the Vietnam War casualties were husbands and 20 percent were fathers; approximately 250,000 Americans were bereaved by the death of an immediate family member. Another 750,000 had an immediate family member who was seriously injured in Vietnam.

Family related problems of Vietnam veterans were not a common focus of research. Polner, cited by Figley (1978a), included reactions of family members in a detailed investigation of nine Vietnam combat veterans. In every case family members perceived a significant impairment in the veteran's emotional stability. The effect of the veteran's emotional stability upon family interaction and the course of the veteran's psychological readjustment were not addressed.
Lumry, Cedarleaf, Wright and Braatz, cited by Figley (1978a), surveyed 200 Vietnam veterans who received treatment at a large midwestern V.A. hospital. A high percentage were found to be experiencing interpersonal problems. Fifty-seven percent of the sample had family relationship problems, 58 percent had socialization problems and most were experiencing complications in their personal adjustment and were unable to maintain satisfying interpersonal relationships. Nace, Meyers, Obrien and Ream, cited by Figley (1978a), supported these findings. They found that subjects in the depressed group of previously tested substance abusers, who attributed their emotional discord to military duty, had significantly higher degree of problems that led to separation and divorce. The Nace study was a follow up to previously tested drug abusers in comparison to a medical control group. The data's confirmation of family problems among Vietnam veterans was thought to be coincidental at best.

Figley's (1978a) summary of the research he reviewed grouped the opinions concerning the severity, prevalence and importance of the prolonged effects of traumatic stress on a veteran's emotional health. Varied opinions were grouped in a dichotomy: the stress evaporation and the residual stress perspective. The stress evaporation perspective held that the combat veteran did suffer some stress effects from combat but any problems disappeared after returning home. The residual stress perspective held that combat-related stress reactions were inevitable and that a significant number of veterans experienced immediate psycho-social readjustment problems that originated in Vietnam.
Stress Evaporation Perspective

The stress evaporation perspective held that few combat veterans experienced stress related adjustment problems. Combat was considered a severe stress event and transient reactions could occur, yet repatriated combat veterans' present social adjustment was not expected to be significantly different from noncombat veterans. If symptoms were present, they would have disappeared prior to recent testing.

Enzie, Sawyer and Montgomery, cited in Figley (1978a), found no significant differences between the manifest anxiety level of Vietnam veterans and a random sample of undergraduate male students. The presence and amount of combat experienced by the veteran was not assessed. Worthington (1978) reviewed several studies as well as his own and found no significant differences between veterans who did and did not serve in Vietnam in regards to anomie, self-concept and social adjustment. Worthington held that pre-service variables accounted for both the in-service and post-service adjustment. As in most studies in this area, differences between combat and non-combat veterans were not assessed.

The most widely cited research in support of the stress evaporation perspective was completed by Borus and cited by Figley (1978a). He found that 23 percent of 765 Vietnam veterans interviewed had any record of disciplinary or emotional maladjustment in the first seven months subsequent to their return to the states. The external validity of this sample has been questioned on the basis that all the sampled
veterans were still on active duty, and the comparison sample did not include discharged veterans. The comparison group was composed of 244 nonveteran military personnel who did not serve in Vietnam. No follow-up data was present concerning the adjustment level of the veteran sample subsequent to discharge from military duty and the Vietnam veterans were not separated by level of combat involvement. A final concern was a selection artifact present in the military policy which delayed military discharge until medical and psychological examinations were passed and which may have influenced the "voluntary" responses of the veterans sampled.

Segal and Segal, cited by Figley (1978a) did not find support for a difference between veterans and nonveterans in respect to Likert attitudes such as trust in government and isolationism-interventionism. This research had limited significance for a study of the adjustment problems of Vietnam veterans since the sample was small, few Vietnam veterans were included, combat and noncombat veterans were not differentiated and attitude was not thought to be highly correlated with adjustment.

Panzarella, Mantell and Bridenbaugh (1978) sampled 143 American soldiers stationed in Germany who sought mental health services. The sample included 34 Vietnam veterans. The study attempted to focus upon psychiatric "fallout" among Vietnam veterans. No significant differences were found in the Vietnam sample. The results were suspect because of the small sample size, the lack of differentiation between combat and noncombat veterans, and the active military status of the German sample.
Figley thought that the purpose of the research was an attempt to refute the emerging literature that described major adjustment complications experienced by Vietnam veterans (Figley 1978a, p. 62).

Residual Stress Perspective

A number of social scientists have supported the position that Vietnam veterans are suffering from significant psychological adjustment problems. The origin of the readjustment problems were thought to have been related to their combat experiences.

Struen and Solberg, cited by Figley (1978a), compared a group of 88 Vietnam psychiatric patients were compared to a matched group of personnel in the process of discharge from military duty. The Vietnam veteran group appeared to differ significantly from the pre-veteran group in terms of their lower coping abilities, more stressful parental relationships and greater incidence of drug and alcohol abuse. The study's inability to establish military duty as a primary factor in the presenting adjustment problems and the limited generalization of the sample of V.A. psychiatric patients to the total population diminished its usefulness.

Yankelvich, cited by Figley (1978a), found several significant differences between veteran and nonveterans in a survey of 2,516 non-college youth, 176 of them Vietnam veterans. Veterans had double the unemployment, expressed lower morale, were more pessimistic about the future, felt greater estrangement from American society, were less strict in their moral viewpoint, and were more liberal regarding social
and political questions. The research was for popular consumption, and the lack of documented statistical validity limited its conclusive validity.

Strayer and Ellenhorn, cited by Figley (1978a), interviewed a random sample of 40 veterans discharged from the Army during the Vietnam conflict in an effort to differentiate between those that experienced adjustment problems and those that coped with their experiences and had successfully readjusted to civilian life. Their results suggested that depression, hostility, guilt and maladjustment were experienced by a large number of Vietnam army veterans. Combat involvement appeared to be related to a negative attitude toward the war, guilt, depression, and feelings of hostility. The severity of the adjustment problem was found to be highly correlated with the amount of combat experience. Sixty percent of the veterans involved in moderate to heavy combat were rated by three clinical judges as poorly adjusted and in need of professional help.

Pollack, White and Gold, cited by Figley (1978a), found significant differences between 54 combat veterans and noncombat fellow college students. Veterans that displayed marked differences in political attitudes, were more likely to exhibit alienation regarding their military activity in Vietnam, exhibited little confidence in their ability to control their destiny and were more likely to view violence as necessary for certain groups to get their way. Wikler, cited by Figley (1978a), supported the findings concerning alienation, and Brady and Rapport, cited by Figley (1978a), supported the findings concerning violence.
Nace, Meyers, O'Brien and Ream, cited by Figley (1978a), reported
the incidence of depression in a two year follow-up study of 150 vet­
erans who were once treated in Vietnam for drug abuse or other medical
problems. Structured interviews and the Beck Depression Inventory were
utilized. Thirty-five percent of the veterans were found within the
clinical depressed range while another 15 percent were within the
mildly depressed range. The depressed veterans were more likely to
have experienced combat, disciplinary action, less education and divorce/
separation.

Defazio, Rustin and Diamond, cited by Figley (1978a), compared a
sample of 47 heavy combat veterans' responses to a questionnaire and
psychological checklist with nonheavy-combat veterans. The subjects
were asked to report the presence or absence of symptoms prior to,
during, and subsequent to service duty. It was found that both the
level of combat experience and the time periods were significantly
related to psychiatric symptoms. Pre-service characteristics were
similar for the groups but combat veterans reported significantly more
problems than noncombat veterans during and subsequent to service duty.
The problems included: disturbed sleep, feeling blue, something is
wrong with my mind, more nervous than others, life is a strain, irrita-
bility, inability to relax, and difficulty being close to others. All
veterans reported a fewer number of symptoms in the present, yet combat
veterans retained twice the number of symptoms as noncombat veterans.

Figley and Eisenhart, cited in Figley (1978a), analyzed data from
a survey of veterans on two college campuses in respect to qualitative
interpersonal adjustment scores (IPA). Noncombatants had significantly higher IPA scores except during the premilitary period. Noncombatants had fewer physical fights, arguments with the law, violent dreams and fantasies, and incidents of excessive alcohol or marijuana use.

Haley (1978) surveyed Vietnam veterans seeking help at the Boston V.A. Outpatient Clinic and found that 75 percent of those who saw combat in Vietnam were suffering from some form of combat related stress disorder. Hunter's (1978) review of several studies focused upon the POW veteran and his family. The review concluded that incarceration had both an immediate and long term deleterious effect upon adjustment within family and marital relationships.

Conclusions

Figley (1978a) developed the following conclusions based on the review of the existing research. First, little attention had been focussed upon the family readjustment problems of the Vietnam veteran. This was in distinct contrast to the research subsequent to W.W. II and the comprehensive research directed at families of Vietnam POW's. Second, pre-service factors including personality, family life, and psychosocial variables appeared to be related to in-service and post-service adjustment among Vietnam veterans. Third, Vietnam era veterans were not significantly different from nonveterans in most areas of interpersonal and intrapersonal adjustments when either service in Vietnam or combat experiences were not controlled. Fourth, there appeared to be convincing evidence that suggested that service in
Vietnam was a significant factor in psychological readjustment. Veterans exposed to combat appeared to be significantly different from noncombat veterans in respect to orientations to violence, psychological symptoms, indicies of depression, political alienation and adjustment problems.

President's Commission on Mental Health

A special working group on President Carter's Commission on Mental Health dedicated a chapter to the mental health problems of Vietnam era veterans (President's Commission on Mental Health, 1978). The report included demographics of the Vietnam veteran population, a description of the veterans' adjustment problems, a statement of current intervention strategies and recommendations for future action.

Eight and one-half million Americans served in the military forces during the ten year Vietnam Era. Two million, eight hundred thousand served in Southeast Asia, one million were exposed to combat or life-threatening conditions, and 300,000 became casualties. These veterans, associated with members of their families were estimated to number 25 million and were thought to pose "an acute--and largely unmet--national need for mental health, rehabilitative, and diverse social support systems" (p. 1324).

The increased demand for psychological and social support systems by Vietnam veterans was not unequivocally linked to service conditions, yet five major problem areas were identified. The first area was that of psychiatric disorders. Although the immediate, acute psychiatric casualty rate was lower for the Vietnam campaign than for other wars,
the actual rate of mental and emotional disorders was ultimately found to be higher. A second problem area was the large number of veterans experiencing drug and alcohol problems. The U.S. Public Health Service estimated that one-half million Vietnam veterans were alcoholics.

A third problem was the stigmatization of the Vietnam veteran as "losers," "misfits" and "public risks." This stereotype was a major obstacle to readjustment and was thought to have contributed to a significantly higher unemployment rate for veterans than for nonveterans. Many veterans found themselves in a deleterious cycle of poor employment opportunities, job turnover, lowered self-esteem, and exacerbation of existing health and emotional problems. Unrealized expectations upon return to the United States often contributed to a sense of being disadvantaged, betrayed, with resulting negativism, distrust and loss of morale. This fourth area, failure of social integration, presented a major concern for one out of five Vietnam veterans.

An extensive number of American families experienced the loss of disability of a family member. Caring to the disabled veteran with readjustment problems and grieving for those who died were heavy burdens felt by these families. The high rates of separation and divorce that were found within many of these families were thought to be indicative of this burden and represented the fifth problem area; family breakdown.

Formal responsibility for programs directed towards veterans' needs was placed upon the Veterans Administration, The Department of Health, Education, and Welfare, and the Department of Labor. Significant assistance was also sought from veterans' self-help groups, private organizations as well as state and local governments.
Major shortcomings were thought to be present in Federal policy. These included: insufficient knowledge regarding the causes, manifestations, and effects of war related mental health problems; fragmentation in Federal programs; failure of benefit programs to account for the disparity between national and local socioeconomic conditions; and stigmatization of Vietnam veterans. The major themes of the numerous recommendations were: to increase research funds for the respective Federal agencies to determine the psychosocial needs of Vietnam Era veterans; to accelerate and improve coordination and collaboration between responsible agencies for delivery of necessary mental health, social and educational services; and to make an effort to remove the stigma associated with participation in Vietnam era military service.

Recent Research

Egendorf (1982) reviewed the recent literature concerning the psychosocial issues of the Vietnam veteran. The following summary was based upon Egendorf's review. Four themes emerged: the unique characteristics of the war; postwar malaise and clinical syndromes; different response patterns to combat experience; and the unique aspects of psychological recovery and healing among Vietnam veterans. He pointed out that the majority of veterans suffered from a subclinical malaise rather than from a diagnosable disorder. Intervention was viewed as essential as well as a new, more sophisticated conceptualization of stress, more diverse forms of intervention and a greater effort to inspire national respect for the veteran.
The Unique Circumstances

In No Victory Parade, Polner, cited by Egendorf (1982), completed 204 indepth interviews from an available sample of veterans who were attending college. This qualitative assessment revealed a theme of alienation, betrayal and resentment over being sent to Vietnam and now being criticized. These conclusions were supported by Harris polls during 1971, and 1980 and by a national survey by Yankovich that found Vietnam veterans to be more alienated than their peers.

Similar findings were found by the most comprehensive epidemiological study undertaken to date authored by Egendorf, Farley and Remez (1981) entitled, Legacies of Vietnam. This field study was conducted from 1977 to 1978 and consisted of a random telephone sample of 1,340 American men who were eligible for military service during the peak years of the Vietnam conflict (1964-1972). The sample included veterans and nonveterans who were interviewed for three to five hours with a set of standardized questions. Those that served in Vietnam experienced significantly more problems than their peers. This conclusion was based on a statistical analysis that controlled for race, education, age, and socioeconomic background. The 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.

Postwar Syndromes and Malaise

A large segment of the literature reviewed by Egendorf (1982) in respect to postwar syndromes and malaise was also covered by the work
of Figley (1978a) which has been previously described. Egendorf supported Figley's conclusion that veterans exposed to the most extreme stress in combat showed a greater incidence of psychological difficulty. The studies that did not find a significant difference between veterans and their peers on indicies of mental health had not made adequate distinction between different levels of combat. The lack of significant differences between veterans and their peers on a large sample of mental health indicies was not thought to support the absence of a significant problem but an inadequacy of the diagnostic criteria as a sole basis for evaluation. The research was thought by Egendorf to support the usefulness of the Diagnostic and Statistical Manual of Mental Disorders' (DSM III) diagnostic criteria (American Psychiatric Association, 1980).

The review by Egendorf et al. (1981) of a random sample of veterans interviewed for the Legacies of Vietnam study found that 20 to 30 percent would have been considered diagnosable. As many as fifty percent, however, showed signs of troubling unresolved war experiences. Four major themes emerged from these qualitative studies. The first and most common theme was a disruption in varied interpersonal relationships with wives, friends, bosses, and family. The disruption was thought to have originated from combat experiences since the disruptive behavior generally resembled war-time modes of adaption: hostility, aggressiveness, withdrawal or alienation. A second theme was the veterans' experience of post military life as anticlimatic in its lack of the excitement and danger characteristic of their military experiences.
This lack of excitement seemed to be associated with the futility and resignation which derived from a problematic homecoming that inhibited resolution of the war experience.

A third theme was the lack of meaning an important minority felt concerning their war experiences and present life. The memories of death, destruction, killing and survival engendered an existential crisis concerning life and death as arbitrary and inconsequential. A fourth theme was an intense preoccupation with the social, political and metaphysical issues raised by the war. This more articulate minority of veterans focused upon a human need to render war obsolete. With the realization of human's destructive potential, they assumed a responsibility to attempt the alteration of the human condition.

**Individual Differences**

Although Vietnam service and combat experience may have made a significant impact on a veteran's current functioning, Egendorf's (1982) review identified several factors which also affected the veteran's positive readjustment. Figley's review (1978a) noted evidence that personality factors, family life, and psychosocial factors correlated with a veteran's present functioning. Similar qualitative, correlational findings were present in the work of one of the research teams reviewed in *Legacies of Vietnam*. Kadushin, Boulanger and Martin (1981) found significant relationships between indicies of current adjustment and the psycho/social variables of race, education, supportiveness of early family, socioeconomic setting, employment and marital status. It
is vital to note that the correlational findings were not causal statements and that the research had numerous limitations present within many of the studies previously described.

Wilson (1977) conducted structured interviews with a self-selected sample of 356 Vietnam veterans in the Cleveland area from 1967 to 1977. He delineated four patterns of adjustment among the men sampled. The first and most severely disturbed group were viewed as suffering from "acute identity dysfusion." These men experienced the highest level of negative effect from the war. They were characterized by high degrees of mistrust, anxiety, doubt, shame, guilt, inferiority, isolation, withdrawal, stagnation and despair. The second type were described as having an "exploitative orientation," and were characterized as extroverted, Machiavellian, impulsive, and opportunistic.

The third and largest group was characterized as conventional, well adjusted and integrated. These men were not deemed significantly different from their nonveteran counterparts. These men also viewed the war as negative, yet did not exhibit the extreme alienation and resentment. They wished to move beyond the war to establish and promote their families and careers. A fourth group consisted of men who professed a humanistic or existential orientation. They sought a sense of meaning, self-actualization, integrity within their lives and were concerned with issues of justice, equity, altruism, harmony and dignity.

Egendorf's et al. (1981) research in Legacies of Vietnam, supported the presence of the four major groups. Five percent led highly disorganized lives, 15 percent had erratic life patterns, 70 percent led
stable lives and 10 percent led exemplary lives. The disorganized segment were expected to resist and avoid intervention. The erratic sample, whose symptoms were more circumscribed, were expected to be the most accessible and responsive to assistance. Innovative, flexible policies and methods of outreach and intervention would be necessary for this sample since many of them did not view themselves to be in need of intervention.

Recovery and Healing

Systematic study in the area of recovery and healing has been scant according to Egendorf (1982). The retrospective data from the Legacies of Vietnam (Center for Policy Research, 1981) has been the most current source for suggestions concerning treatment outcomes. Kadushin, et al. (1981) found that while a significant relationship between combat exposure and current stress did exist, the level of complaints had decreased over the period during which the veteran was home. A definitive answer concerning the relative effectiveness of intervention versus the unaided healing process and concerning the relative effectiveness of various forms of intervention was not discernable. Several findings from the study, however, did suggest several hypotheses regarding treatment dynamics.

Martin (1981), subsequent to control of the variables of exposure to combat and other background factors, found that levels of demoralization and stress among Vietnam veterans varied inversely with the support received from their mates. Kadushin, et al. (1981) reported a similar
finding that the increased "density" of a veteran's peer networks may have been significantly related to a reduced level of current stress. Such findings supported the contention that the level of supportiveness of a veteran's family and friends may have been significant factors in reducing the deleterious nature of post-war maladjustment. These findings also supported an emphasis upon veteran support groups as a form of therapy.

In the *Legacies of Vietnam* study, Egendorf, et al. (1981) investigated the degree to which respondents were receptive to working through past trauma. Moderately strong evidence was found to support the hypothesis that higher levels of reflectiveness were associated with a more positive sense of well-being among veterans with comparable backgrounds and level of combat experience.

Four major tendencies were found useful in distinguishing successive levels of "working through." The first theme was associated with men who had made little progress in the working-through process. These men remained locked in various forms of avoidance. They attempted either to forget or deny problems while they experienced numerous symptoms of a problematic readjustment. A second sizable minority had moved beyond total avoidance but only admitted conflict in respect to what others or the "government" had done. This dynamic was thought to have been a manner by which personal responsibility could be avoided and appeared to be associated with veterans who were having difficulty in reestablishing direction and purpose in their lives.
A third tendency was for the veterans to become enmeshed in an immobilizing level of conflict and guilt. These men appeared to have little hope of progressing beyond their immediate pain and problematic adjustment. A fourth tendency exhibited by approximately a third of the men was to move beyond the avoidance, blame, self-pity, and self-punishment. Combat experiences and the consequences were confronted through personalization and a new life direction was sought to amend as well as move beyond the complications associated with their war experiences.

Use of the Minnesota Multiphasic Personality Inventory in Post-Traumatic Stress Disorder Research

Merbaum and Hefez (1976) compared the MMPI profiles of 24 hospitalized psychiatric casualties with 12 wounded medical casualties during the Yom Kippur War. The purpose of the research was to compare the personality characteristics of the two groups of soldiers who were confronted with extreme war stress. A second purpose was to compare the MMPI characteristics of the Israeli and American psychiatric casualties in respect to a medical control group. The sample mean profiles of the Israeli and American psychiatric casualties showed no scale overlap with the medical control groups. Twenty-one of 24 subjects in the Israeli psychiatric sample had four or more scales above a T score of 70. Only one of the twelve medical subjects had two clinical scales above a T score of 70.

The authors concluded that: (a) the psychiatric group's mean profile was unmistakably pathological, and the medical group's was normal; (b) essentially identical findings were found in the comparisons

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between American psychiatric and medical samples; (c) three of the highest four scales found in the Israeli psychiatric group were shared by the American psychiatric sample. Schizophrenia, depression and psychasthenia were common to both. Hypochondriasis was present for the Israelis and Psychopathic Deviate was present for the Americans; and (d) the Israeli and American medical samples showed similarity on only one of the four highest clinical scales. The Israeli psychiatric sample was summarized as experiencing more painful affect, while the American psychiatric sample profile suggested more anger, impulsivity, aggressiveness and poorly controlled behavior.

Merbaum (1977) readministered MMPI's and conducted intensive interviews with 17 Israeli military psychiatric casualties one year after they had been discharged from a psychiatric ward. A comparison between hospitalization and post-hospitalization results yielded no significant differences in any of the scales. The degree of emotional distress for the casualties remained at a significant level and was characterized by extreme depression, anxiety and extensive physical complaints. The interview reports were consistent with the MMPI results and the prolonged stress effect had precipitated major problems in reestablishing community adjustment.

Codebook assessment of the profiles suggested diagnoses of schizophrenia, schizoaffective type, psychoneurotic or undifferentiated schizophrenia. Although the diagnoses did not agree with the clinical data, the characteristics of the profiles did. The subjects were characterized by blunted or inappropriate affect, depression, problematic
concentration, fear, ideas of reference, feelings of inadequacy, loss of interest, weakness, fatigue, withdrawal and introversion. Social maladjustment was a common complaint during the interviews. Complaints concerned job problems, lapses of memory, difficulty with concentration, marital problems, social isolation, sexual impotency, inability to express warm feelings to others, guilt, shame and felt stigmatization due to the soldier's psychological breakdown during the war. Some of the subjects were thought to be psychologically prone to react negatively to stress due to a high level of felt personal vulnerability. A large majority presented no indications to support the assumption of an increased vulnerability to stress.

Penk et al. (1981) sought information concerning the effect of combat upon veteran's psychological state. They administered MMPIs to Vietnam combat and noncombat veterans, all of whom were patients in a Veterans Administration Medical Center's alcohol and drug dependence treatment program. These investigators were unable to distinguish between the groups on the basis of MMPI scores. A subgroup of veterans with heavy combat experience reported significantly more psychological problems on a symptom checklist than did light combat veterans. Although the study did provide some documentation concerning possible problematic effects of heavy combat upon veterans, the study was not designed to obtain specific information concerning PTSD. The study had several of the same limitations which Figley (1981a) identified as having contributed to the false conclusion stress evaporation. Little differentiation is found between veteran groups if the subjects' combat experience and reaction to combat are not controlled. The lack of distinction
between the sample groups in Penk's study could have been due to the increased within-group variance attributable to the lack of distinction between level of combat exposure and individualized reactions. This lack of statistical distinction has often resulted in the false conclusion of there being no distinction between combat and noncombat groups. This conclusion has often been generalized to profess a lack of distinction also between veterans who did and did not experience a stress reaction.

Roberts, Penk, Rovinowitz, Dolan, Gearing and Patterson (1982) sampled 274 Vietnam-era veterans who sought treatment for substance abuse. This was one of the initial research attempts to differentiate between levels of combat experience among veterans experiencing PTSD as operationalized by DSM III (American Psychiatric Association, 1980) diagnostic criteria. Veterans with evidence of PTSD were compared with a non-PTSD group of Vietnam combat veterans and a noncombat group of Vietnam-era veterans. The Horowitz Interpersonal Problem Inventory and the MMPI were utilized as indices of interpersonal, familial, and social maladjustment. The PTSD group scored significantly higher on clusters of problems dealing with intimacy and sociability than did either of the comparison groups. Significant differences between PTSD and non-PTSD veterans scored higher on MMPI scales of paranoia, psychopathic deviate, social introversion, social maladjustment, family problems, and manifest hostility. These results were not attributable to premilitary adjustment differences or to confounding demographic variables. The ability to generalize these results was limited due to the fact that the sample included only patients seeking treatment for
substance-abuse disorders and that a self report inventory was used for diagnosis of PTSD.

Foy, Sipprelle, Rueger and Carroll (1984) surveyed 43 Vietnam veterans who sought services at a Los Angeles Veterans Administration medical center. The subjects were assigned to PTSD positive and negative groups based upon DSM III diagnostic criteria. Subjects were extensively assessed to examine the relative contributions of premilitary adjustment, military adjustment, and extent of combat exposure to the development of combat related PTSD. Groups were also compared on MMPI profiles and psychological checklists. No significant differences were found between the groups for the three adjustment indices. Multiple regression analysis demonstrated that combat exposure and, to a lesser degree, military adjustment were significantly related to PTSD symptomatology. Premilitary adjustment was not related. Discriminate analysis showed that the MMPI had a moderate ability to classify subjects. A problem checklist indicative of anxiety-based disorders, particularly anxiety and pervasive disgust, correctly discriminated 90% of the subjects.

The comparison between PTSD positive and PTSD negative groups was extended to include twelve items on the problem checklist that were considered common symptoms of PTSD. Nine items produced a significant difference (p < .001). These included in order of entry: tension/ anxiety, disgust, alcohol abuse, suicidal thoughts, hostility, marital problems, depression, irritability and restlessness. The second discriminate analysis used the standard MMPI scales as potential variables. Both the PTSD positive and the PTSD negative groups had
clinical elevations in the frequency, depression, psychopathic deviate, psychasthenia, and schizophrenia scales, although the PTSD group had greater elevations. The PTSD positive group also had clinical elevations in the hypochondriasis, hysteria, and paranoia scales. The PTSD positive group had significantly higher scores ($p < .05$) on the depression, paranoia, psychasthenia, and schizophrenia scales. The PTSD positive two point scale was an schizophrenia/depression (8/2).

Fairbank, Keane and Malloy (in press) sampled a group of Vietnam combat veterans to assess the psychological characteristics of veterans that experienced PTSD and the utility of traditional psychological inventories for assessment of the disorder. The study was designed to determine if responses to a variety of standardized inventories (MMPI, Beck Depression Inventory, Zung Depression Scale, State-Trait Anxiety Inventories, and Fear Survey Schedule-II) would distinguish three matched groups. The groups included: (a) those with an exclusive diagnosis of PTSD; (b) those with other nonpsychotic psychological diagnoses; and (c) those with combat experience who were well adjusted.

Univariate and multivariate statistical analysis indicated that the assessment battery had good success in discriminating between PTSD veterans from relevant comparison groups. The MMPI results for the varied groups included no clinical elevations (clinical scale T scores > 70) for the normal group, only elevations on clinical scales for depression, psychopathic deviate and schizophrenia for the pathological group, while the means for all clinical scales except masculine-feminine, hypomania and social introversion were elevated for the PTSD
group. The high two point scales were similar for the Psychiatric (depression/schizophrenia, 2/8) and PTSD (schizophrenia/depression, 8/2) group. The characteristics of a schizophrenia/depression configuration included anxiety, depression, agitation, sleep disturbance, somatic symptoms, fear of loss of control, guilt and avoidance of close interpersonal contacts. The small sample size of this study prohibited definitive conclusions. The findings did support the general utility specific tests in identifying veterans with PTSD. The classification results were conservative as well as discriminating. Only false negative classifications of PTSD were produced; no subjects were incorrectly classified as PTSD.

Summary

Early writings concerning stress reactions to combat focused generally upon analytical considerations. A soldier was considered vulnerable to experiencing stimuli during combat that could overwhelm their normal coping abilities which could produce a neurosis. In Figley's (1981a) review of research on Vietnam combat veterans completed prior to 1978, he categorized the research into the stress evaporation and residual stress perspectives. The stress evaporation perspective held that stress reactions could occur, yet they were transitory and not immediately observable. The residual stress perspective held that a long term, maladaptive stress reaction continued to be experienced by numerous Vietnam combat veterans. Figley concluded that pre-service factors appeared to be related to a combat stress reaction; Vietnam-era
vets were not significantly different from nonveterans when Vietnam combat experience was not controlled; and, combat veterans appeared to be significantly different from noncombat veterans in respect to orientations to violence, psychological symptoms, depression, alienation and adjustment problems. Egendorf reviewed the literature concerning Vietnam veterans prior to 1982. Egendorf (1982) agreed with Figley's conclusions and stressed that the majority of Vietnam veterans suffered from a subclinical malaise rather than from a diagnosable disorder.

President Carter's Commission on Mental Health stated that the Vietnam veteran posed an acute and unmet national need for mental health, rehabilitative and social support systems. The research reviewed concerning the MMPI characteristics of Vietnam combat veterans generally results from inpatient psychiatric or substance abuse samples. The MMPI profiles of heavy combat or PTSD veterans depicted elevations of numerous clinical scales. There were strong similarities between the MMPI profiles collected from the different PTSD of heavy combat samples. The diagnoses often associated with the MMPI profile did not agree with the clinical data while the dynamics did agree. The subjects were characterized by blunted or inappropriate affect, depression, problematic concentration, fear, ideas of reference, feelings of inadequacy, fatigue, withdrawal and alienation. The MMPI data was thought to support the usefulness of DSM III diagnostic criteria, that a significant level of psychopathology remains for veterans diagnosed as PTSD, and that the MMPI had good success in differentiating PTSD veterans from relevant comparison groups.
CHAPTER III

DESIGN AND METHODOLOGY

Design

A survey/descriptive research design was used in this study. This design reflected the purpose of this study to survey, through use of the MMPI, the psychological and social problems that Vietnam combat veterans diagnosed as PTSD presented to an outpatient mental health clinic upon their voluntary request for help. The design fulfills the purpose of this study to seek a general understanding of the research area and provide a basis for inferences concerning how to intervene into the disorder and suggest possible future research directions.

The design has many limits. The design's lack of statistical conclusive validity as defined by Cook and Campbell (1979) limited the study's ability to measure the relationship between the PTSD diagnosis and the MMPI characteristics, to establish the relationship to causal, to discover the particular cause-effect construct of the relationship and to generalize the findings to other populations.

This study's design also lacked comparison to the normative data of a control group. The MMPI did contain intrinsic normative data concerning the absence of psychopathology as indicated by lack of clinical scale elevations beyond a T score greater than 70 or less than 30. This inherent normative data of the MMPI was used in agreement with the study's goal of understanding the nature of the disorder rather
than to develop a causal relationship. The ability to generalize the findings beyond the specific research area was limited by the lack of a randomized sample. The sample was expected to reflect the particular influences of its selection and cannot be expected to reflect the characteristics of the total PTSD population.

The limits present in the survey design used in this study supported the use of the MMPI as the research instrument. The MMPI was chosen in lieu of an interview technique in that it offered improved objectivity and quantification of PTSD. The standardization of the MMPI lessened the possibility of observer and interpretive bias influencing the final data analysis. Each test was administered in the same manner and interpreted in respect to accepted references. The extent of the MMPI assessment used in this study, the extensive use of subscales and critical items, was an effort to saturate the researcher with information. The extent of the evaluation was thought to be important due to the nature of survey research to search for data not readily anticipated. The standardization and acceptance of the MMPI as a research tool allowed for comparison of this study's MMPI sample profile with other sample profiles collected from Vietnam combat veterans. This standardization and common use allowed for discussion of concurrence between the varied samples.

Population and Sample

Subjects (N = 28) for this research were Vietnam combat veterans who sought voluntary outpatient mental health services at the Grand
Rapids, Michigan Veterans Administration Outpatient Mental Health Clinic. All subjects had a primary diagnosis of Post-Traumatic Stress Disorder (PTSD), chronic or delayed; DSM III (ul), 309.81 (American Psychiatric Association, 1980). The diagnoses were established according to DSM III (ul) criteria by a multidisciplinary diagnostic team consisting of representatives of psychiatry, psychology, psychiatric social work and psychiatric nursing. Two of the team members, this researcher and a Ph.D. psychologist, had received specialized diagnostic and intervention training related to PTSD. Veterans with a psychotic, organic, inpatient psychiatric, or extensive substance abuse history were not included in the sample.

The convenience sample was comprised of the total number of Vietnam combat veterans meeting the selection criteria and requesting outpatient mental health services from the Grand Rapids, Michigan Veteran's Administration Outpatient Clinic between January 1982 and January 1984. Although the sample was not randomized, it was thought, due to the two year research period, that the sample provided an adequate representation of the population seeking services at the Grand Rapids clinic. The use of expert opinion concerning the selection of research subjects was also thought to increase the studies' validity as numerous other studies used a self-report symptom checklist for selection criteria.

Diagnostic Criteria

All the subjects were diagnosed as Post-Traumatic Stress Disorder, chronic or delayed, 309.81, according to the Diagnostic and Statistical
Manual of Mental Disorders, Third Edition (DSM III) (American Psychiatric Association, 1980). Diagnostic criteria were as follows:

A. Existence of a recognizable stressor that would evoke significant symptoms of distress in almost everyone.

B. Reexperiencing of the trauma as evidenced by at least one of the following:
   (1) Recurrent and intrusive recollections of the event;
   (2) Recurrent dreams of the event;
   (3) Sudden acting or feeling as if the traumatic event were reoccurring, because of an association with an environmental or ideational stimulus.

C. Numbing of responsiveness to or reduced involvement with the external world, beginning some time after the trauma, as shown by at least one of the following:
   (1) Markedly diminished interest in one or more significant activities;
   (2) Feelings of detachment or estrangement from others;
   (3) Constricted affect.

D. At least two of the following symptoms that were not present before the trauma:
   (1) Hyperalertness or exaggerated startle response;
   (2) Sleep disturbance;
   (3) Guilt about surviving when others have not, or about behavior required for survival;
   (4) Memory impairment or trouble concentrating;
(5) Avoidance of activities that arouse recollection of the traumatic event;

(6) Intensification of symptoms by exposure to events that symbolize or resemble the traumatic event (p 238).

Variables

Variables included the MMPI validity, clinical and research scales, the Harris-Lingoes subscales and the Wiggins content scales. The primary interpretive resource for these scales was Graham (1977). A complete listing of the variables is contained in Appendix A.

Another source of information was the Koss-Butcher critical items, cited by Graham (1977). These critical items are a collection of specific responses that were found to offer interpretations consistent with other sources of evaluation. Information gained from a percentage of veterans responding in a clinically significant direction was presented as an additional source of the veteran's self-descriptive data.

Significance of MMPI Scale Elevations

The MMPI was developed by Hathaway and McKinley around 1939 as an aid in the routine psychiatric case work-up of adult patients. An instrument was sought to assess the severity and nature of the conditions under treatment. An empirical approach to scale construction was utilized. Over one thousand statements were collected from interview manuals, forms, guides, case studies, clinical experience, personal and
attitude scales. Many items were eliminated to avoid duplication, vagueness, and poor readability. An effort was made to balance positive and negative wording. The range of general topics covered health, neurology, family, vocations, education, sex, religion, social, affective, cognitive and various psychological symptomatology.

The empirical method of scale development employed by Hathaway and McKinley involved asking the subjects to accurately describe themselves by answering "true" or "false" to each of the MMPI statements. The scorer or interpreter did not assume the subject provided a verifiable account of themselves. Hathaway and McKinley also administered the original 504 items to samples of normal men and women as well as to selected adult patients in the clinics and wards of the University of Minnesota Hospitals. The normal subjects were friends and relatives of patients. Any normal subject who was under the care of a physician was excluded. Hathaway and McKinley found that the characteristics of the normal sample corresponded with the general Minnesota population. The performance of this sample of normal men and women in each of the component scales was the basis for the test profile norms (Dahlstrom, Welsh and Dahlstrom, 1972).

Profile development required tabulation of raw scores for each scale. The scores were then converted to T scores for ease of comparison. A T score of 50 was considered a mean score for the normal group. Although no definitive line was drawn between a clinical and subclinical level for each scale, a general strategy, and the one utilized in this research, was to consider a score between one and two standard deviations
from the norm (T score between 60 and 70, between 40 and 30) to have subclinical significance, and a score in excess of two standard deviation (T score greater than 70 or less than 30) to have clinical significance. This means of interpretation was generally utilized by Dahlstrom, Welsh, and Dahlstrom, (1972), Marks, Seeman, and Haller, (1974), Graham (1977), and Duckworth (1979).

Operational Hypotheses

The survey nature of this research limited the development of experimental hypotheses. On the basis of the diagnostic criteria, common complaints, and levels of emotional discord reported in the literature, the MMPI profile analysis of veterans diagnosed as PTSD was expected to reflect:

A. Clinically significant psychopathology as indicated by one or more clinical scale elevations beyond two standard deviations above the mean (T ≥ 70).

B. Clinical elevations of the depression, psychopathic deviate, and schizophrenia scales (T ≥ 70);

C. Clinical elevations of the following research scales:
   (1) Anxiety (A)
   (2) Ego Strength, (low) (Es)
   (3) Manifest Anxiety (MAS)

D. Clinical elevations of the following Harris-Lingoes subscales (T ≥ 70):

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(1) Subjective Depression (D1)
(2) Mental Dullness (D4)
(3) Brooding (D5)
(4) Inhibition of Aggression, (low) (Hy5)
(5) Family Discord (Pd1)
(6) Authority Problems (Pd2)
(7) Social Alienation (Pd4A)
(8) Self Alienation (Pd4B)
(9) Persecutory Ideas (Pa1)
(10) Poignancy (Pa2)
(11) Social Alienation (Sc1A)
(12) Emotional Alienation (Sc1B)
(13) Lack of Ego Mastery, Cognitive (Sc2A)
(14) Lack of Ego Mastery, Conative (Sc2B)
(15) Lack of Ego Mastery, defective inhibition (Sc2C)

E. Clinical elevations of the following Wiggins Content Scales (T ≥ 70):
(1) Social Maladjustment (SOC)
(2) Depression (DEP)
(3) Poor Morale (MOR)
(4) Authority Conflict (AUT)
(5) Manifest Hostility (HOS)
Data Collection

MMPI protocols were obtained from existing psychological data administered during routine outpatient V.A. mental health clinical assessments. The MMPI profiles used were obtained from Vietnam combat veterans who participated in the early stages of treatment at the Grand Rapids V.A. Outpatient Clinic and were diagnosed as PTSD. The profiles surveyed were administered during a period from January 1982 to January 1984 from veterans with a primary diagnosis of PTSD with no psychotic, organic, inpatient psychiatric or extensive substance abuse history. The MMPI clinical and research scales were discussed with each subject as part of their initial treatment to identify problem areas, symptoms, personality characteristics, and areas of potential change.

Data Analysis

Due to the survey nature of this research, data analysis was limited to the use of descriptive statistics. The means and standard deviations of both raw and T scores of each scale were presented. A mean profile based upon mean sample T scores was established. Two-point scales were identified for each subject, and the percentage of the two-point code was presented. This procedure duplicated the common interpretive strategy using two-point analysis. The interpretive strategy was expanded to include the use of the Harris-Lingoes subscales, Wiggins content scales as well as a critical item analysis. The Harris-Lingoes subscales provided data concerning the specific dynamic that
elevated particular clinical scales. The Koss-Butcher critical items reflected the actual items selected by the subjects to pinpoint specific problems or dynamics. This assessment of the MMPI profile was expected to provide valuable input data concerning the degree of psychopathology, affective pain, problem areas, and personality dynamics that Vietnam combat veterans experiencing PTSD reported upon seeking outpatient mental health assistance.
CHAPTER IV

DATA ANALYSIS

Subjects

The twenty-eight subjects used for this research were voluntary outpatient mental health clients. All subjects had received a primary diagnosis of Post-Traumatic Stress Disorder prior to psychological testing. All diagnoses were established by a multidisciplinary diagnostic team in accordance with DSM III criteria as presented in Chapter III's section on diagnostic criteria. None of the subjects were seeking compensation for psychiatric conditions related to their experience in Vietnam. Several were receiving compensation, yet primarily for medical disabilities. The subjects were white males except for one Mexican/American. Several black subjects were considered for the research, yet a substance abuse diagnosis conflicted with selection criteria. Subjects average age was 33.76 with a standard deviation of 2.11 and a range from 28 to 39 years of age. All of the subjects engaged in a period of outpatient psychological treatment. One subject committed suicide subsequent to a premature termination of treatment.

Variables

Variables were the scores of the three validity scales, the ten standard clinical scales, the twelve research scales, the twenty-eight Harris-Lingoes subscales, the thirteen Wiggins content scales and the
Koss-Butcher critical items. These scales were described in the Variable Section of Chapter III and listed in Appendix A.

Procedure and Analysis

The MMPI profiles obtained from the 28 subjects were computer analyzed for the validity, clinical, research, Harris-Lingoes subscales, Wiggins Content scales, and Koss-Butcher critical items. Scale raw scores were tabulated and mean and standard deviations were derived for each scale. The mean raw scores were transferred to T scores for ease of comparison and clinical assessment. K-corrected T scores were utilized for the appropriate clinical scales: hysteria, psychopathic deviate, psychasthenia, schizophrenia, and hypomania. Two-point codes were identified for each of the twenty-eight subjects, and the distribution of the codes were determined. The percentage of subjects that responded in the clinical significant direction on the Koss-Butcher critical items were tabulated. The critical items contained within Table 6 were limited to items selected by 60 percent or more subjects.

Figure 1 represented a mean sample profile of the clinical scales and several research scales. Table 1 contained the means, standard deviations and indication of subclinical or clinical elevation of the MMPI validity and clinical scales. Table 2 contained the research scales, while Table 3 listed the Harris-Lingoes subscales. Table 4 included the Wiggins content scales. Two-point codes were identified for each of the 28 subjects, and the distribution of these codes were contained in Table 5. The response percentage to the Koss-Butcher critical items were represented in Table 6.
Results

A complete description of the data contained within the tables is described in the following sections. The extent to which the data supports or refutes the expected outcomes is also discussed.

MMPI Mean Sample Profile

The MMPI Mean Sample Profile of K-corrected T scores was compiled and presented in Figure 1. The raw score, T score and degree of clinical elevation for the clinical scales was contained in Table 1. The profile contained a clinical elevation of the frequency validity scale and six of the ten clinical scales. The two-point code was 2-8 (depression/schizophrenia) with additional clinical elevations of the hypochondriasis, psychopathic deviate, paranoia, psychasthenia and schizophrenia scales. The profile supported the first two expected outcomes described in Chapter 3. Clinical significant psychopathology was indicated by six clinical scale elevations beyond two standard deviations from the mean (T ≥ 70). Clinical elevations of the depression, psychopathic deviate and schizophrenia scales were also present.
Figure 1. MMPI mean sample profile of Vietnam combat veterans \((n = 28)\) diagnosed as post-traumatic stress disorder and requesting outpatient mental health care.
# Table 1

**MMPI Clinical Scales; Means, Standard Deviations, and Clinical Elevations.**  
Vietnam Combat Veterans (N = 28) Diagnosed as Post-Traumatic Stress Disorder and Requesting Outpatient Mental Health Care.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(T Scores)</td>
<td>(T Scores)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Validity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lie</td>
<td>3.6428</td>
<td>2.3287</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Atypical Response</td>
<td>16.1428</td>
<td>6.8998</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Guardedness</td>
<td>10.7142</td>
<td>6.0421</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td><strong>Clinical Scales</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypochondriasis</td>
<td>21.1071</td>
<td>6.4712</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>37.0714</td>
<td>6.6662</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Hysteria</td>
<td>26.9642</td>
<td>5.7701</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Psychopathic Deviate</td>
<td>31.8928</td>
<td>5.2092</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Masculine/Feminine</td>
<td>27.2142</td>
<td>4.7089</td>
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<td></td>
</tr>
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<td>Paranoia</td>
<td>16.6787</td>
<td>4.3889</td>
<td>**</td>
<td></td>
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<td>Psychasthenia</td>
<td>38.3928</td>
<td>5.2938</td>
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</table>

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Table 1 (continued)


<table>
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</thead>
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<td>Schizophrenia</td>
<td>42.9285 90</td>
<td>9.0140 20</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Hypomania</td>
<td>23.4642 65</td>
<td>4.5091 10</td>
<td>*</td>
<td></td>
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<tr>
<td>Social Introversion</td>
<td>39.7142 67</td>
<td>10.9201 12</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MMPI Research Scales**

The compiled results of the MMPI Research scales were presented in Table 2. The anxiety and manifest anxiety scores were considered high, and the ego strength and social responsibility were considered low. These scores supported the expected result of the anxiety, ego strength (low), and manifest anxiety scale elevations. The social responsibility scale (low) elevation was not an expected outcome.

There are no absolute cut offs for designating high or low Research Scale scores. The validity of the interpretive information is considered more applicable as the score becomes more elevated. The same interpretive strategy applies to low scores (Graham, 1977). It is important to note the determination of high/low scores reflected
Table 2

<table>
<thead>
<tr>
<th>Scales</th>
<th>Means (Raw Scores)</th>
<th>Standard Deviations (Raw Scores)</th>
<th>Clinical Elevation (* = 1 S.D.)</th>
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<tbody>
<tr>
<td></td>
<td>(T Scores)</td>
<td>(T Scores)</td>
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<tr>
<td>Anxiety</td>
<td>26.0000</td>
<td>8.4940</td>
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<td></td>
<td>67</td>
<td>11</td>
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<tr>
<td>Repression</td>
<td>16.2857</td>
<td>4.3363</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>10</td>
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<tr>
<td>Ego Strength</td>
<td>36.2142</td>
<td>6.7349</td>
<td>* (low)</td>
</tr>
<tr>
<td></td>
<td>36</td>
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<td></td>
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<tr>
<td>Low Back Pain</td>
<td>11.3571</td>
<td>2.6834</td>
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<td></td>
<td>57</td>
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<td></td>
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<tr>
<td>Dependency</td>
<td>32.4286</td>
<td>9.2353</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>64</td>
<td>11</td>
<td></td>
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<tr>
<td>Dominance</td>
<td>13.0357</td>
<td>3.4154</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Social Responsibility</td>
<td>14.7857</td>
<td>4.1665</td>
<td>* (low)</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>10</td>
<td></td>
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<tr>
<td>Prejudice</td>
<td>18.7142</td>
<td>5.1772</td>
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<tr>
<td></td>
<td>63</td>
<td>9</td>
<td></td>
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<tr>
<td>Status</td>
<td>17.4642</td>
<td>4.2998</td>
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<td></td>
<td>49</td>
<td>9</td>
<td></td>
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<tr>
<td>Control</td>
<td>31.6785</td>
<td>4.9892</td>
<td>*</td>
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<tr>
<td></td>
<td>63</td>
<td>13</td>
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<tr>
<td>Manifest Anxiety</td>
<td>29.1423</td>
<td>8.0356</td>
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a personal clinical judgment that may differ between clinicians. This determination of scale elevations reflected the interpretive strategy utilized by this researcher in the final discussion of the MMPI data.

**MMPI Harris-Lingoes Subscales**

The compiled results of the Harris-Lingoes subscales were contained in Table 3. The Harris-Lingoes subscales were a result of Harris and Lingoes' attempt to factor analyze the trait or dimension measured by the depression, hysteria, psychopathic deviate, psychasthenia, and schizophrenia scales. The scales were assessed in reference to their particular content and labelled according to the author's clinical judgment of the specific trait measured. These scales were viewed as supplementary to the standard clinical scales and were not meant to be used instead of the clinical scales (Graham, 1977).

The scales that supported the clinical elevation of the standard scale were listed in order of the greatest to the least influence. The traits that appear to be the primary sources of elevation in the clinical depression scale were subjective depression (D1), mental dullness (D4), and brooding (D5). Psychomotor retardation (D2) and physical malfunctioning (D3) were not as strong an influence upon the scale elevation. These results were consistent with the expected outcomes.

The hysteria scale approximated a clinical elevation with a T score of 69. The lassitude-malaise (Hy3) and somatic complaints (Hy4), subscales were elevated while denial of social anxiety (Hy1), need for affection (Hy2), and inhibition of aggression (Hy5) were within the

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Table 3

MMPI Harris Subscales; Means, Standard Deviations, and Clinical Elevations. Vietnam Combat Veterans (N=28) Diagnosed as Post-Traumatic Stress Disorder and Requesting Outpatient Mental Health Care

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Table 3 (continued)

MMPI Harris Subscales; Means, Standard Deviations, and Clinical Elevations. Vietnam Combat Veterans (N=28) Diagnosed as Post-Traumatic Stress Disorder and Requesting Outpatient Mental Health Care

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Table 3 (continued)

MMPI Harris Subscales; Means, Standard Deviations, and Clinical Elevations. Vietnam Combat Veterans (N=28) Diagnosed as Post-Traumatic Stress Disorder and Requesting Outpatient Mental Health Care

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normative range. The elevation (low) of the inhibition of aggression scales was an expected result, yet this was not produced. The elevation of the lassitude-malaise and somatic complaint scales were not predicted.

The factors that contributed to a clinical elevation of the psychopathic deviate scale were self alienation (Pd4B), and familial discord (Pd1). Social alienation approximated a clinical elevation. Authority problems (Pd2) and social imperturbability (Pd3) were not as strong an influence upon the elevation. The elevated scales were expected except for the lack of elevation of the authority problem scale.

The primary contribution to the elevated paranoia scale was the poignancy (Pa2 subscale. Persecutory ideas (Pa1) and naivete (Pa3) were not as strong an influence. An elevated poignancy and persecutory idea scale was an expected outcome.

Lack of ego mastery, cognitive (Sc2A), and lack of ego mastery, conative (Sc2B) were the strongest influences upon the elevated schizophrenia scale. These subscale elevations were expected outcomes. Bizarre sensory experiences (Sc3) and lack of ego mastery, defective inhibition (Sc2C) also had smaller contributatory effects upon the schizophrenia scale elevation. The clinical elevation of the bizarre sensory experiences subscale was not predicted, yet it was slightly elevated. The lack of ego mastery, defective inhibition elevation was an expected outcome. Social alienation (Sc1A) and emotional alienation (Sc1B) approximated clinical elevations, and had the least effect upon the scale elevation. A clinical elevation of the emotional alienation scales was an expected outcome which did not materialize.
The Hypomania scale was not clinically elevated. The psychomotor acceleration (Ma2) subscale did have a slight clinical elevation. The amorality (Ma1), imperturbability (Ma3), and ego inflation (Ma4) subscales were within the normative range. The elevation of the psychomotor acceleration scale was not expected.

**MMPI Wiggins Content Scales**

The MMPI Wiggins Content Scales were presented in Table 4. These scales were developed in a similar fashion as the Harris-Lingoes subscales. Interpretation of the scales were meant to reflect an assessment of the content of each scale. No definitive cut off point was established for high or low scores. The interpretive strategy used was to consider T scores of 60 and seventy for high scores and T scores of 30 to forty for low scores. Interpretive information was thought to be more applicable at the extreme scores. This is consistent with Graham's (1977) method.

Clinical elevations were expected for the social maladjustment (SOC), depression (DEP), poor morale (MOR), authority conflict (AUT), and manifest hostility (HOS) scales. Depression (DEP), organic symptoms (ORG), family problems (FAM), and social maladjustment (SOC) were considered high. Poor Health (HE), Phobias (PHO), Psychoticism (PSY), and Poor Morale (MOR) were slightly elevated.
Table 4

MMPI Wiggins Content Scales; Means, Standard Deviations, and Clinical Elevations. Vietnam Combat Veterans (N=28) Diagnosed as Post-Traumatic Stress Disorder and Requesting Outpatient Mental Health Care

<table>
<thead>
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<th>Scales</th>
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<th>Standard Deviations (Raw Scores)</th>
<th>Clinical Elevation (* = 1 S.D.)</th>
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Table 4 (continued)

MMPI Wiggins Content Scales; Means, Standard Deviations, and Clinical Elevations. Vietnam Combat Veterans (N=28) Diagnosed as Post-Traumatic Stress Disorder and Requesting Outpatient Mental Health Care

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MMPI Two-Point Codes

Two-point codes were established for each of the 28 subjects. The distribution of the two-point codes was presented in Table 5. The expected outcome of the clinical elevation of the depression, psychopathic deviate, and schizophrenia scales was corroborated by the MMPI mean sample profile presented in Figure 1. This was further supported by the combined percentage of 71.33 percent of the individual profiles that contained one of these three scales as the high point scale. The percentage of the individual profiles with one of the depression, psychopathic deviate, or schizophrenia as the second highest elevated scale totaled 60.65 percent. The only scale that exceeded any of the second point total. Psychopathic deviate was contained in 7.12 percent of the profiles as a second point elevation and was the only predicted scale with a lower percentage than psychasthenia.
Table 5
Percentage of MMPI Codes in Which Each Pair Occurs from Vietnam Combat Veterans (N=28) Diagnosed as Post-Traumatic Stress Disorder and Requesting Outpatient Mental Health Care.

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High Point Total: 14.26 | 24.97 | 0.00 | 24.96 | 3.56 | 3.56 | 21.40 | 7.14 | 99.85

Note: Scales 5 and 10 were not present in any two point codes and are not contained in this table.
MMPI Koss-Butcher Critical Items

The MMPI Koss-Butcher critical items selected by 60 percent or more subjects was contained in Table 6. The items were thought, by this researcher, to reflect several aspects of the PTSD diagnostic criteria and reported common symptomatology.

The reexperiencing of a recognizable stressor through recurrent intrusive recollections was reflected by:

(T) I have had very peculiar and strange experiences.

(F) Most nights I go to sleep without thoughts or ideas bothering me.

(F) I have no enemies who really wish to harm me.

(T) I have strange and peculiar thoughts.

A numbing of responsiveness to or reduced interest with the external world as shown by a marked diminished interest or feelings of detachment or estrangement from others was reflected by:

(T) I have had periods of days, weeks, or months when I couldn't take care of things because I couldn't get going.

(T) I commonly wonder what hidden reason another person may have for doing something nice for me.

(T) I certainly feel useless at times.

(T) I have difficulty in starting to do things.

(T) It is safer to trust nobody.

(T) I have often felt that strangers were looking at me critically.

(T) I am sure I am being talked about.

(F) My daily life is full of things that keep me interested.
Table 6
MMPI Koss-Butcher Critical Items Selected by 60 Percent or More Vietnam Combat Veterans (N=28) Diagnosed as Post-Traumatic Stress Disorder and Requesting Outpatient Mental Health Services.

<table>
<thead>
<tr>
<th>Number</th>
<th>Response</th>
<th>Item</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>F</td>
<td>I wake up fresh and rested most mornings.</td>
<td>78.57</td>
</tr>
<tr>
<td>5</td>
<td>T</td>
<td>I am easily awakened by noise.</td>
<td>78.57</td>
</tr>
<tr>
<td>13</td>
<td>T</td>
<td>I work under a great deal of tension</td>
<td>71.43</td>
</tr>
<tr>
<td>33</td>
<td>T</td>
<td>I have had very peculiar and strange experiences.</td>
<td>78.57</td>
</tr>
<tr>
<td>39</td>
<td>T</td>
<td>At times I feel like smashing things.</td>
<td>92.86</td>
</tr>
<tr>
<td>41</td>
<td>T</td>
<td>I have had periods of days, weeks, or months when I couldn't take care of things because I couldn't get going.</td>
<td>89.29</td>
</tr>
<tr>
<td>43</td>
<td>T</td>
<td>My sleep is fitful and disturbed.</td>
<td>78.57</td>
</tr>
<tr>
<td>72</td>
<td>T</td>
<td>I am troubled by discomfort in the pit of my stomach every few days or oftener.</td>
<td>60.71</td>
</tr>
<tr>
<td>76</td>
<td>T</td>
<td>Most of the time I feel blue.</td>
<td>71.43</td>
</tr>
<tr>
<td>97</td>
<td>T</td>
<td>At times I have a strong urge to do something harmful or shocking.</td>
<td>78.57</td>
</tr>
<tr>
<td>107</td>
<td>F</td>
<td>I am happy most of the time</td>
<td>82.14</td>
</tr>
<tr>
<td>136</td>
<td>T</td>
<td>I commonly wonder what hidden reason another person may have for doing something nice for me.</td>
<td>60.71</td>
</tr>
<tr>
<td>142</td>
<td>T</td>
<td>I certainly feel useless at times.</td>
<td>85.71</td>
</tr>
<tr>
<td>145</td>
<td>T</td>
<td>At times I feel like picking a fist fight with someone.</td>
<td>60.71</td>
</tr>
</tbody>
</table>
Table 6 (continued)

MMPI Koss-Butcher Critical Items Selected by 60 Percent or More
Vietnam Combat Veterans (N=28) Diagnosed as Post-Traumatic
Stress Disorder and Requesting Outpatient Mental Health Services.

<table>
<thead>
<tr>
<th>Number</th>
<th>Response</th>
<th>Item</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>152</td>
<td>F</td>
<td>Most nights I go to sleep without thoughts or ideas bothering me.</td>
<td>78.57</td>
</tr>
<tr>
<td>215</td>
<td>T</td>
<td>I have used alcohol excessively.</td>
<td>67.86</td>
</tr>
<tr>
<td>238</td>
<td>T</td>
<td>I have periods of such great restlessness that I cannot sit long in a chair.</td>
<td>85.71</td>
</tr>
<tr>
<td>242</td>
<td>F</td>
<td>I believe I am no more nervous than most others.</td>
<td>71.43</td>
</tr>
<tr>
<td>259</td>
<td>T</td>
<td>I have difficulty in starting to do things.</td>
<td>60.71</td>
</tr>
<tr>
<td>265</td>
<td>T</td>
<td>It is safer to trust nobody.</td>
<td>71.43</td>
</tr>
<tr>
<td>278</td>
<td>T</td>
<td>I have often felt that strangers were looking at me critically.</td>
<td>67.85</td>
</tr>
<tr>
<td>284</td>
<td>T</td>
<td>I am sure I am being talked about.</td>
<td>60.71</td>
</tr>
<tr>
<td>290</td>
<td>T</td>
<td>I work under a great deal of tension.</td>
<td>71.43</td>
</tr>
<tr>
<td>301</td>
<td>T</td>
<td>Life is a strain for me much of the time.</td>
<td>75.00</td>
</tr>
<tr>
<td>318</td>
<td>F</td>
<td>My daily life is full of things that keep me interested.</td>
<td>100.00</td>
</tr>
<tr>
<td>323</td>
<td>T</td>
<td>I have had very peculiar and strange experiences.</td>
<td>78.57</td>
</tr>
<tr>
<td>328</td>
<td>T</td>
<td>I find it hard to keep my mind on a task or job.</td>
<td>64.29</td>
</tr>
</tbody>
</table>

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Table 6 (continued)

MMPI Koss-Butcher Critical Items Selected by 60 Percent or More
Vietnam Combat Veterans (N=28) Diagnosed as Post-Traumatic
Stress Disorder and Requesting Outpatient
Mental Health Services.

<table>
<thead>
<tr>
<th>Number</th>
<th>Response</th>
<th>Item</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>337</td>
<td>T</td>
<td>I feel anxiety about something or someone almost all the time.</td>
<td>71.43</td>
</tr>
<tr>
<td>347</td>
<td>F</td>
<td>I have no enemies who really wish to harm me.</td>
<td>100.00</td>
</tr>
<tr>
<td>349</td>
<td>T</td>
<td>I have strange and peculiar thoughts.</td>
<td>60.71</td>
</tr>
<tr>
<td>379</td>
<td>F</td>
<td>I very seldom have spells of the blues.</td>
<td>89.29</td>
</tr>
<tr>
<td>418</td>
<td>T</td>
<td>At times I think I am no good at all.</td>
<td>78.57</td>
</tr>
<tr>
<td>555</td>
<td>T</td>
<td>I sometimes feel that I am about to go to pieces.</td>
<td>82.14</td>
</tr>
</tbody>
</table>

Additional symptoms of hyperstartle or exaggerated startle response, sleep disturbance, guilt/depression about surviving, and memory impairment or trouble concentrating were thought to be reflected by:

(T) I am easily awakened by noise.
(T) I work under a great deal of tension.
(T) At times I feel like smashing things.
(T) My sleep is fitful and disturbed.
(T) At times I have a strong urge to do something harmful or shocking.
(T) At times I feel like picking a fist fight with someone.
(T) I have periods of such great restlessness that I cannot sit long in a chair.

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(F) I believe I am no more nervous than most others.

(T) Life is a strain for me much of the time.

(T) I feel anxiety about something or someone almost all the time.

(T) I sometimes feel that I am about to go to pieces.

Sleep disturbance;

(F) I wake up fresh and rested most mornings.

(T) My sleep is fitful and disturbed.

(F) Most nights I go to sleep without thoughts or ideas bothering me.

Guilt/depression about surviving;

(T) Most of the time I feel blue.

(F) I am happy most of the time.

(F) I very seldom have periods of the blues.

(T) At times I feel I am no good at all.

Memory impairment or trouble concentrating;

(T) I work under a great deal of tension.

(T) I find it hard to keep my mind on a task or job.

(T) I have strange and peculiar thoughts.

The specific data obtained from the MMPI profiles was presented in this chapter. The final chapter will assess and discuss the data's implication for the MMPI's profile validity, the degree of indicated psychopathology, personality and problem dynamics, treatment planning, and future research.
The purpose of this research was to survey a sample of Vietnam combat veterans diagnosed as Post-Traumatic Stress Disorder who sought voluntary outpatient mental health care. Information was collected, using the Minnesota Multiphasic Personality Inventory, concerning their self-reported experiences of psychological pain, their psychopathology, common symptomatology, their adjustment problems and the intra and interpersonal dynamics that maintained and inhibited the remediation of PTSD. This information was thought to be a valuable asset in planning both program and therapeutic reactions to PTSD.

Three research questions were developed. The initial question concerned the presence and degree of psychopathology indicated by the MMPI profiles. The second research question focussed on the psychodynamics of PTSD as reflected in the MMPI profiles. Study of this second question included assessment of the validity, clinical, research, Harris-Lingoes subscales, the Wiggins content scales and the Koss-Butcher critical items. A final research question concentrated on the data's implications for treatment intervention.

Profile Validity

Further discussion of the MMPI sample profile was not possible without the establishment of the profile's validity. MMPI profile validity was determined through the "validity" scales: the cannot say (?), lie
(L), frequency (F), and guardedness (K) scales. The frequency scale was elevated beyond the clinical significant level ($T = 80$). This indicated that the subjects of this sample selected items which no more than 10 percent of the men and women in the Minnesota normative samples endorsed.

Interpretations based upon early applications of the MMPI assumed that an F scale elevation of 80 invalidated the profile. Later research stated that likely sources of F scale elevation included: social protest, reading or comprehension difficulties and severe neurotic or moderate psychotic reactions that led the subjects to report the unusual experiences or behavioral disturbances contained within the scale. A number of studies have indicated that the F scale mirrors the extent and severity of psychopathological involvement (Dahlstrom, Welsh, & Dahlstrom, 1972).

Graham (1977) suggested that a moderately high F scale characterized a person who has deviant social, political or religious convictions, manifests a severe neurotic or psychotic condition, or, if free of serious psychopathology, can be described as moody, restive, affective, restless or dissatisfied. Lachar (1974) stated F scale elevations in this range were typically associated with inordinately high symptom severity and were not usually indicative of the "cry for help" or the "fake bad"/malingering profiles traditionally associated with F scale elevations above 80.

Twenty-two of the twenty-eight individual MMPI profiles analyzed in this study of Vietnam combat veterans, produced F scale elevations above a T score of 70, with a mean T score of 80. In a similar study,
Penk et al. (1981) reported the heavy combat sample's mean F scale score to be 73. Foy, Sipprelle, Rueger and Carroll (1984) reported a F scale score of 79.1 in the PTSD group. Fairbank, Keane and Malloy (in press) found a F score of 75 for the PTSD group. This consistency between diverse samples of Vietnam veterans was thought to support an interpretation of the F scale elevation as representing a high level of symptom severity or a dramatic cry for help. The interpretation of the F scale elevation as indicative of a high level of symptom severity was thought by this researcher to be the most applicable to this PTSD sample.

Since none of the subjects in this sample used their emotional disorder as a basis for a disability claim and since all cooperated voluntarily with outpatient treatment, "secondary gain" did not appear to affect the integrity of reported symptomatology. The clinical manifestation of symptom severity was also consistent with the clinical assessment of symptom severity. This researcher's clinical perception of the veterans as cooperative subjects presenting a severe level of psychological symptomatology supports the validity of their MMPI profiles as indicators of a true psychological status.

Degree of Psychopathology

The presence of significant psychopathology was operationalized in Chapter III as the elevation, beyond two standard deviations from the mean (T > 70), of one or more of the clinical scales. The elevation, beyond two standard deviations from the mean, of six of the ten clinical scales clearly indicated the presence of a significant level of
psychopathology experienced by the sample tested. The elevated scales, in order of degree of elevation, were: depression, schizophrenia, psychasthenia, psychopathic deviate, hypochondriasis, and paranoia. The remaining four clinical scales of hysteria, hypomania, social introversion and masculine-feminine were elevated beyond one standard deviation with the hysteria scale approximating a clinical elevation (T = 69).

These scale elevations were consistent with the MMPI research reviewed in Chapter II. Merbaum and Hefez (1976) found in their comparison of MMPI profiles of hospitalized psychiatric casualties with MMPI profiles of medical casualties, both from the Yom Kippur War, that the psychiatric group's mean profile was unmistakably pathological. A comparison of Israeli and American psychiatric casualties with respective medical groups produced essentially identical findings. Clinical elevations of the schizophrenia, depression and psychasthenia scales were common to both psychiatric samples. A psychopathic deviate scale elevation was present in the American psychiatric sample. These four scale elevations were also present in the sample reported in this research.

Penk et al. (1981) compared heavy and light combat veterans who sought inpatient treatment for alcohol and drug abuse. The heavy combat sample produced clinical elevations in the hypochondriasis, depression, psychopathic deviate, psychasthenia, schizophrenia and hypomania scales. These elevations were not significantly different from elevations characteristic of light combat veterans who sought inpatient treatment. It was important to note that the primary problem was substance abuse,
and sample differentiation was based upon heavy vs light combat variables rather than positive or negative PTSD variables. Since any two mal-adjusted groups could have appeared equally disturbed on any one clinical scale for different reasons, Penk concluded that the MMPI scales were not suitable for differential diagnosis of Post-Traumatic Stress Disorder in an inpatient setting. The elevated clinical scales present in the heavy combat group of Penk's study were also present in the sample reported in this research except for the hypomania scale.

Foy, Sipprelle, Rueger, and Carroll (1984) compared samples of PTSD positive and PTSD negative veterans. The PTSD positive sample produced MMPI clinical scale elevations in the hypochondriasis, depression, hysteria, psychopathic deviate, paranoia, psychasthenia and schizophrenia scales. Significant differences (p < .05) between the PTSD positive and PTSD negative samples were present in the depression, paranoia, psychasthenia, and schizophrenia scales. The PTSD group produced higher elevations in all scales.

Fairbank, Keane and Malloy (in press) compared samples of veterans with an exclusive diagnosis of PTSD, those with other nonpsychotic psychological diagnoses, and those with combat experience who were well adjusted. The MMPI results for the varied groups included no clinical elevations for the normal group, clinical elevations on the depression, psychopathic deviate and schizophrenia scales for the psychological group and elevated means for all clinical scales except masculine-feminine, hypomania and social introversion for the PTSD group. A MANOVA comparison of the PTSD and psychological groups indicated
significantly higher scores on the ten clinical scales for the PTSD subjects. The PTSD and psychological profiles were essentially parallel in form, while the PTSD subjects reported greater overall distress.

The sample presented within this research was consistent with the Fairbank research. The sample profile was thought to manifest a significant level of psychopathology. This sample profile has added to the growing amount of research that supports the residual stress perspective. Veterans that are diagnosed as experiencing PTSD have reported that a significant level of psychopathology and psychological pain still remain years after the initial trauma.

MMPI Profile Characteristics

The subject's test taking attitudes were considered an indication of the manner in which the subjects approached the evaluation and treatment setting. The sample profile was thought to reflect an authentic expression of significant and painful symptomatology. The justification for this interpretation was based upon data presented in the validity section of this chapter. It is important to note that a traditional interpretation of the validity scales would question the profile's validity. This interpretation would suspect malingering, "faking bad," or exaggeration of symptomatology. Such an interpretation was a convenient justification to discount the experience of a significant stress disorder by a portion of Vietnam combat veterans. Common complaints presented by PTSD veterans were not only the lack of social support but also the continued denial by others of their plight.
Continued lack of legitimatization of PTSD veterans' pain through an invalidation of the MMPI profiles would be a tragic contamination of psychological research and treatment. An invalidation of the PTSD profile is also thought to be a gross denial of an evergrowing body of demographic and psychological research that supports the presence of a significant problem.

Profile interpretation focused upon the elevated depression, schizophrenia, and psychasthenia scales. This profile reflected an individual who experienced depression, despondency and pessimism that may be expressed in feelings of hopelessness. Although the level of depression was high, it was not the sole focus of this profile. The flow of thoughts also may have been quite atypical and confused. Subjects who produce such profiles often have difficulty with concentration and clear thinking. They also often have difficulties expressing emotions in a modulated and adaptive manner.

Subjects with this profile often have had a long history of personal isolation. Many report having encountered rejection, physical illness and death within their close relationships. They are likely to feel guilty, worried, fearful and vulnerable to threat. Common irritants are often perceived as major threats, and the magnitude of their responses are often out of proportion to the dictates of reality. Terms often used to describe these patients are tense, nervous, tremulous, sweaty. Shy, inhibited and withdrawn are also characteristic adjectives.

Inner conflicts about emotional intimacy are frequent since emotional involvement poses a threat. Such subjects often withdraw,
keep others at a distance, perceive themselves as blameworthy and express feelings of doubt, self-accusation and self-condemnation. The elevated psychasthenia scale often represents characteristics of perfectionism, compulsivity, indecisiveness as well as possible ruminative preoccupations (Marks, Seeman and Haller, 1974).

Elevations of the psychopathic deviate and paranoia scales characterize subjects who have difficulty incorporating the values and standards of society and who may engage in asocial or anti-social behaviors. Interpersonal relationships are often stormy; rebelliousness and conflict with authority are frequent. Such subjects often feel they have been treated unfairly, blame others, and are suspicious and guarded (Graham, 1977).

Subscale analysis of the Harris-Lingoes subscales of this study's subjects indicated that subjective depression and mental dullness were the two strongest dynamics of the elevated depression scale. Brooding was also elevated but to a lesser degree. These subscale elevations reflected depressed affect, lethargy, lack of interest, tension, viewing life as no longer worthwhile and troubles with memory and concentration. The depressive characteristics of immobilization, withdrawal, denial of hostile feelings, denial of good health and a wide variety of somatic complaints were not major influences in the elevated depression scales of this sample.

The second highest clinical scale was schizophrenia. The lack of ego mastery, cognitive and lack of ego mastery, conative were the most highly elevated subscales. These subscales reflected depression,
despair, excessive worry, fear of losing control of one's mind, strange thought processes, feelings of unreality, difficulties with concentration and memory, and a response to stress through withdrawal. These traits were consistent with the PTSD diagnostic criteria of hyperstartle or exaggerated startle response, survival guilt and intrusive recollections of a traumatic stress event. The characteristics of restlessness, fear of losing control of impulses, and unusual sensory experiences were less elevated. The traits of social alienation, apathy or emotional alienation were the least influential.

The psychasthenia and psychopathic deviate clinical scales had approximately equal elevations. Harris and Lingoes did not develop subscales for the psychasthenia scale. The subscales of familial discord and self-alienation were the highest elevated subscales within the psychopathic deviate clinical scale. The familial discord subscale is indicative of attitudes toward the family not as a source of love, understanding and support but as a source of unpleasant criticism and controversy. The self-alienation subscale records feelings of discomfort, perceptions of daily life as not interesting or rewarding and expressions of regret, guilt or remorse for past deeds. The traits identified in the familial discord and self-alienation subscales were consistent with PTSD diagnostic criteria of detachment or estrangement from others, diminished interest in daily life, memory and concentration impairment, as well as survival guilt. Traits identified in the authority problem and social alienation subscales were not as influential in the elevated clinical scale. The social imperturbability subscale
was within the normative range. The traits of resentment of social standards, lack of respect for the values of others, and trouble with the law had a minimal influence upon the scale. These traits, however, are often the ones most often applied to Vietnam combat veterans.

The poignancy subscale of the paranoia clinical scale had the greatest influence upon the clinical elevation. This subscale characterizes a person who views themself as more high strung and sensitive than others, feels misunderstood and may look for risky or exciting activities to feel better.

The trait often assumed to be experienced by PTSD subjects of persecutory ideas was not as strong an influence upon the scale elevation. The poignancy trait of viewing life as anti-climactic after the stimulation of combat was a common clinical theme presented by Vietnam veterans. This trait is certainly not symptomatic of a paranoid disorder that some may misconstrue from the scale elevation. The misinterpretation of the elevated paranoia scale as a reflection of persecutory ideation is thought to be another common error often applied to Vietnam combat veterans.

The elevation of the Wiggins content scales of depression, organic symptoms, family problems and social maladjustment further supported the aforementioned traits. The depression scale reflected traits of depression, guilt, regret, worry, loss of pleasure in life, poor motivation, sense of unworthiness and difficulty in concentration. The organic problem scale contained somatic symptoms that may be functional in origin, difficulty in memory and concentration, and poor judgment.
Reports of an unpleasant family situation, lack of love and understanding, and experiences of criticism within the home situation were characteristics of the family problem scale. The social maladjustment scale reflected traits of self-consciousness, introversion, bashfulness, embarrassment and reticence (Graham 1977).

The above mentioned traits were consistent with frequent personal clinical observations of veterans who lived with considerable repressed guilt and anger concerning their war experiences. The anger and frustration often became self-directed which resulted in depression. Projection and displacement of the anger and guilt upon others was common which alienated close interpersonal relationships. Alienation from others and from the veteran's own affective experience continued the cycle of repression, depression, and detachment.

The social stigma of being a Vietnam combat veteran was thought to have reinforced the avoidance of personal affective expression which furthered social withdrawal. The statements of "How can I tell my wife I was a trained killer," "I learned to never tell anyone I am a Vietnam vet," and "If I tell anyone what it was really like, they call me a liar," were quite common. This difficulty with closeness is significant when viewed in the light of the Legacies of Vietnam study (Center for Policy Research, 1981) which stressed the necessity of close supportive interpersonal relationships for a Vietnam veteran's readjustment. Due to the dread of rejection and criticism, the veteran feared what they needed most. The self-imposed alienation was also thought to be reinforced by a dynamic learned in Vietnam of "The last person I got close
to was blown away, everything I touch gets destroyed." Thus the veteran's resistance to a healing process are quite understandable in view of the reality of combat experience.

It was quite unfortunate that veterans were often clinically assessed, with support from a misinterpretation of a MMPI profile, as exhibiting a psychotic or characterological dynamic. A veteran often justifiably rebelled against such an assessment which reinforced their sense of alienation and placed even more obstacles in the path of healing reconciliation. The veteran's role as a victim of the trauma continued if they sought protection from inaccurate stigmatization through self and social alienation. It was always disheartening to listen to a veteran relate several instances in which they had ventured forth to express pain, only to be ignored, discounted or judged. The instances often involved individuals well trained in the "helping" professions.

The critical items related in Chapter IV were thought to be consistent with PTSD diagnostic criteria and common symptomatology. The critical items, as the aforementioned clinical scales, can easily be misconstrued if a traumatic stress oriented perspective is not maintained. Several items were excellent examples of potential sources of misinterpretation if a traumatic stress oriented assessment is not considered in lieu of an automatic assumption of a more traditional psychotic or characterological assessment. Seventy-eight percent of the sample responded "true" to the question: "I have had very peculiar and strange experiences." Such a response may indicate a psychotic delusional or hallucinatory experience. It is also quite understandable that a
combat veteran who has experienced one or more traumatic events during the Vietnam war might respond in the affirmative to such a question. Seventy-eight percent answered "false" to: "Most nights I go to sleep without thoughts or ideas bothering me." This response can be interpreted to reflect varied traits of extreme anxiety, thought disturbance, or paranoia. It is also consistent with the presence of intrusive recollections which are characteristics of Post-Traumatic Stress Disorder. "It is safer to trust nobody," was answered "true" by seventy-two percent of the sample. An initial clinical impulse was to consider paranoia. Such a response, however, is also thought to be consistent with the combat survival trait of suspicion toward everyone one encountered. Incidents of fatalities or injuries inflicted by those considered "innocent" civilians were common. Suspicion was a prerequisite for survival. This second interpretation of the critical item is thought to be more appropriate than that of paranoia. One-hundred percent answered "false" to: "I have no enemies who really wish to harm me." The suggestion of paranoia in a negative response to this item takes on new meaning in the context of the reality of a history of lethal enemies in a traumatic combat situation.

The primary consideration in assessing a Post-Traumatic Stress Disorder is the presence of a reality based traumatic stressor that engendered the problematic symptomatology and painful affect. To relate to a veteran experiencing the symptomatology of Post-Traumatic Stress Disorder based upon a misconstrued assessment of his expressed symptoms would certainly reinforce their self-imposed alienation and conviction that no one understood or cared.
Extreme sensitivity was necessary to explore and validate the veteran's immediate and past experience. The MMPI, if used properly, appeared capable of being a valuable tool in the service of a sensitive, yet comprehensive assessment. The MMPI, if misconstrued, can also be a weapon to further alienate a war victim from care. The most viable safeguard was thought to be the accepted standard of knowing both the subject and the instrument well and using the instrument as a means of exploring with the subject their concerns rather than as a device for diagnostic labelling.

Implications for Treatment

The third research question concerned the MMPI data's implication for treatment. The development of a specific treatment modality was thought to be beyond the scope of this research. Many forms of accepted therapy such as psychotherapy, biofeedback, progressive relaxation, hypnosis, group and family therapy were thought to be appropriate if certain appropriate attitudes were maintained. These attitudes are thought to be a prerequisite for the establishment of a productive atmosphere within which the PTSD veterans can experience the security necessary to reexamine their traumatic histories, assess the trauma's impact upon their immediate life, and plan remediative action.

The initial prerequisite is the acceptance of PTSD's existence and the significant emotional pain experienced by veterans suffering from the disorder. The MMPI profiles clearly indicate an extreme level of affective, cognitive, and relationship conflict. The clinical picture
is often one of an agitated depression associated with cognitive confusion, alienation, detachment, guilt, worry, anger and suspicion. The affective pain and cognitive confusion suggested by the MMPI profile is a formidable experience for the veteran as well as the therapist to confront. The veteran's tendency to distrust a treatment resource can easily be exacerbated by even the slightest hint of skepticism regarding the validity of their pain or experiences.

The necessity of acceptance and accurate assessment of PTSD in alcohol treatment programs was stressed by Lacoursiere, Godfrey, and Ruby (1980). Traumatic stress reactions from Vietnam combat or other sources included symptoms that were partially remediated by alcohol. The symptoms of chronic anxiety, restlessness, insomnia and recurrent intrusive dreams eased with alcohol use. Alcohol or substance abuse was a common learned and often accepted means of tension reduction during the Vietnam war experience. The short term relief of the symptoms, increased alcohol tolerance, and habitual alcohol behavior often combined to produce an alcohol abuse problem. The alcohol use, however, often did not produce long term remediation of the symptoms. The partial symptomatic relief of the underlying stress disorder reinforced continued and increased use. If alcohol use was decreased, alcohol withdrawal resulted and produced symptoms similar to the original traumatic symptoms. A vicious circle often developed. A veteran was left to cope with a reemergence of traumatic symptoms if the alcohol abuse problem was addressed without remediation of the PTSD condition. If alcohol had become a learned, effective short term relief from
traumatic stress symptomatology, a return to its use could be expected if the stress disorder was not remediated.

A second prerequisite was the therapist's recognition of the traumatic stressor's role in causing the affective pain and caution against excessive reliance upon a psychotic or characterological explanation. The PTSD diagnostic criteria state:

The essential feature (of PTSD) is the development of characteristic symptoms following a psychologically traumatic event that is generally outside the range of usual human experience.... The stressor producing this syndrome would evoke significant symptoms of distress in most people, and is generally outside the range of such common experiences as simple bereavement, chronic illness, business losses, or marital conflict.... The disorder is apparently more severe and longer lasting when the stressor is of human design. (American Psychiatric Association, 1980, p. 236)

The implication of the above diagnostic criteria was important since PTSD veterans have a tremendous fear of being labelled "mentally ill;" a term suggestive to veterans as a judgment of cowardice or incompetence. The above criteria stressed that PTSD is a normative adaptive reaction to a traumatic stress event. The impact of the stress is more severe when the stressor is of human design. Such an assessment helps to legitimize the veteran's immediate painful affect and avoids the pejorative implications of a "mentally ill" label. A veteran's anger, alienation, and distrust can often become more understandable and amenable to remediation when attributed to a man-made stressor rather than to a personality deficit. This clarification has proven beneficial in easing the veteran's ambivalence regarding treatment. The veteran desires relief from severe emotional pain, yet fears the stigmatization of mental health treatment which is often perceived to
be a confirmation of "mental illness" or cowardice. The stigmatization of "being crazy" was one of the socio/political obstacles which the veteran experienced upon their return home and which accentuated their alienation and detachment. The duplication of this dynamic within a helping relationship would certainly be a tragedy.

A third factor necessary for effective remediation of PTSD is the recognition of traumatic based obstacles that inhibit the formation of an adequate therapeutic alliance. The MMPI profile suggests an extreme level of affective pain with a prevalent coping style of withdrawal and alienation. Alienation is further accentuated by distrust, suspicion, and anger. Veterans often express a learned behavior of "I never tell anyone I am a Vietnam veteran." This statement is associated with a personal sense of regret and vivid memories of the socio/political discord which the war evoked and which labelled veterans as the perpetrators rather than the victims of the war. A strong animosity was often expressed toward all government organizations which may veterans associate with the often lethal ineffectiveness and unresponsiveness of government institutions during and following the war effort. Helping organizations associated with the government or military such as the Veteran's Administration are especially suspect.

Personal clinical experience has confirmed the significant effect of the traumatic stressor upon a veteran's immediate perception, cognitions, and behavioral responses. This effect must be considered when contemplating the marked fear with which many veterans anticipated in the closeness of the therapeutic alliance. The prospect of a therapeutic
alliance often evokes a quick and dramatic challenge from the veteran. This challenge is thought to be reminiscent of the interpersonal combat/trauma dynamic of never trusting a "new guy" until they were tried under fire. The intrapersonal dynamic seems to involve a struggle about whether or not to trust one's physical well being to another. The affective intensity of this struggle is understandable given the life-and-death consequences of dependence on one's peers during combat. Similarly, the veteran's challenge to the therapeutic alliance is thought to be reminiscent of their need in combat to distinguish between one who would "stand and fight" versus one who would "cut and run."

Lowering one's psychological defenses as is encouraged in therapy is thought to be symbolically associated with the often lethal consequences of lowering one's defenses during a state of war. To expect a PTSD veteran to immediately place themselves in an emotionally vulnerable position would be similar to expecting them to expose themselves to fire during combat. Letting down one's defenses in Vietnam was especially significant considering the incidents of trauma inflicted by "friendly fire." The stress of therapy which is meant to be helpful, may evoke an association of friendly fire. On the other hand, if the challenge is met by the therapist, a sense of security and trust could emerge. It was only within this "secured" area that a therapist could expect a veteran to lower their guard and permit the traumatic issues to emerge.

"Don't get close, don't get hurt," another lesson often learned during the combat/trauma experience, is also thought to promote the caution with which the veteran approaches the therapeutic alliance.
These therapeutic considerations were important aids to maintaining patience while attempting to establish a therapeutic relationship. Consideration of the possibility that the last person to whom the veteran got close might have been destroyed—a loss for which the veteran might have felt personally responsible—suggested the advisibility of deferring a characterological interpretation of treatment resistance. Considerable time was required to rekindle the veteran's ability to be close without also incurring the catastrophic expectation that closeness would result in trauma.

The importance of the therapeutic, process oriented goal of easing the fear of intimacy among PTSD veterans was reinforced by the prevalence of alienation and detachment that exacerbated family, marital and interpersonal problems. The Legacies of Vietnam (Center for Policy Research, 1981) study stressed the importance of a supportive, close interpersonal relationship to productive post war readjustment. If a close therapeutic alliance could be established and maintained within the therapeutic setting, generalization of the greater potential for intimacy to a veteran's outside life experience might also be possible. If the veteran was confronted with disrespect, disbelief, or punitive judgments, the problematic defense of detachment would be reinforced.

A fourth prerequisite for effective treatment of PTSD was the recognition by the therapist of the repressed affect that was expected to emerge when a therapeutic alliance was established. The extent of the internal pain was clearly indicated in the number and the severity of the MMPI clinical scale elevations. The content was often quite
startling and confronted the veteran's and the therapist's personal, social, and political beliefs. Intrusive memories of atrocities, death, destruction, anomie, and terror often emerged. Confusion concerning the appropriateness of learned values, the actual worth of human life, and the true motivation of the United States' war purpose often emerged.

A fear of loss of inhibition was often encountered. The elevation of the Harris-Lingoes subscale, lack of ego mastery, defective inhibition (Sc2c) supported the presence of such fears. This fear is expected within any therapeutic experience when a client becomes more aware of instinctual drives. Fear was especially poignant for a combat veteran who knew and may have experienced tremendous personal destructive ability. This destructive ability was often unleashed as a result of frustration and anger experienced during the war effort. A traumatic expectation of inevitable destruction subsequent to the release of repressed affect may be brought to the therapeutic situation. The traumatic expectation associated with affective expression accentuated the necessity of establishing a secure therapeutic alliance and a gradual reprocessing of the traumatic affect.

The intensity of the repressed affect and the extent of the fear of destructiveness associated with the expression of the affect were thought to reinforce the need for extreme caution in any form of therapy such as Gestalt which might accelerate and magnify the expression of repressed affect. The therapist must be cognizant that the level of affect measured by the MMPI profiles reflects a level of pain and
confusion that often is associated with psychotic decompensation. The high level of affective pain may have approximated the veteran's coping threshold. Accentuation of the affect could exceed the threshold precipitating a decompensation that therapy was meant to deter. Personal clinical experience has taught a respect for considerable moderation in the degree and rate of the therapeutic uncovering of traumatic affect.

A fifth treatment attitude was a respect for the strength and endurance of the veteran population. The sample reported in this research were voluntary outpatient mental health clients free of past psychiatric hospitalizations or a primary diagnosis of substance abuse. Marks, Seeman, and Haller (1974) reported that the most common diagnosis of MMPI profiles similar to the PTSD, outpatient mental health sample is a psychotic, schizophrenic condition. In this sample, the chronic nature of the PTSD symptomatology indicates that this level of affective pain has existed for ten to twenty years. The absence of decompensation was thought to reflect the presence of considerable ego resources that can often be harnessed within treatment.

A combat veteran often presented personality characteristics of pride, perseverance, and resilience that were often absent in other mental health clientele. A personal clinical opinion was that the veteran's personal strength has often prevented them from taking advantage of treatment. Individuals with MMPI profiles representing considerably less pain often sought intervention earlier, while the Vietnam veteran has endured the emotional pain since the war. The lack of remediation, however, perpetuated a disorder that may have become increasingly entrenched within an overall personality structure.
The pride, endurance, and perseverance of the Vietnam veteran constituted a therapeutic resource to help the veteran reprocess the painful traumatic affect. A vivid therapeutic memory was a veteran processing a period of intense suicidal intent. He was able to muster personal restraint as he placed a gun to his temple. His memory of the therapeutic input of "I thought Marines did not give up," was related as a significant restraining influence.

Effective therapeutic input, regardless of the technique, was thought to be dependent upon successful implementation of the aforementioned attitudes. The veteran's expectations, thoughts, and responses were thought to reflect the traumatic origins of the stress disorder. These dynamics were expected to be transferred to the therapeutic relationship and process. The effective outcome of therapy was expected to be dependent upon a secure environment within which the catastrophic expectations associated with the lowering one's defenses could diminish. The previously repressed depression, guilt, alienation, anger and distrust must be assessed as consequences of the normative process whereby behaviors necessary for physical and emotional survival within a traumatic setting were learned. The applicability of the traumatic dynamics to the understanding of current needs and of their effect upon readjustment must be assessed in a reality based open-minded manner. Therapeutic understanding can then lead to perceptual, cognitive, and behavioral changes that help return a veteran to a positive state of adjustment, personal pride and respect. If this goal was accomplished the veteran could emerge from the trauma of victimization to the respect of a survivor.
Implications For Future Research

Merbaum and Hefez (1976) noted a strong similarity between the MMPI profiles of Israeli and American psychiatric casualties. Three of the four highest clinical scales; schizophrenia, depression, and psychasthenia, were common to both the Israeli and American samples. The hypochondriacal scale was elevated in the Israeli psychiatric sample while the psychopathic deviate scale was elevated in the American sample. This difference was thought to be indicative of greater amount of painful affect experienced by the Israeli sample compared with the greater amount of anger experienced by the American sample. In addition, statistical differences may have been a function of the cultural differences between the wars and armies. An Israeli soldier was thought to have experienced more guilt concerning a combat stress reaction and to have indirectly manifested the affective pain through somatic concerns. The American sample was thought to have expressed their pain through anger concerning the socio/political ambivalence associated with the Vietnam conflict.

These differences were thought to present a future direction for research. A study of the differences between samples that have experienced combat stress reactions within differing cultural and situational conditions could help isolate the cultural and socio/political factors affecting the occurrence and remediation of PTSD. An interesting comparison could be made between Israeli forces who felt support for their war effort which had a direct impact upon the security
of their homeland and Vietnam veterans who were subject to ridicule in a war effort that many did not support nor felt threatened their homeland.

Another focus for further research could be a comparative study of WW II, Korea, and Vietnam veterans in a effort to explore PTSD as a combat versus a Vietnam issue. Several MMPI profiles were collected by this researcher from WW II and Korean veterans who fulfilled the PTSD diagnostic criteria. The possibility of broadening the scope of this research to include all combat veterans was seriously considered. The lack of adequate numbers of veterans from wars other than Vietnam and the reluctance to introduce an additional source of possible variance led to a sole focus upon Vietnam veterans. Comparison of the profiles from the different wars did not appear to indicate significant differences yet an adequate sample size to make a definitive statement was not available.

Comparisons between stress reactions resulting from various types of traumatic stressors is another viable area of research. Personal clinical experience in applying the diagnostic and theoretical models as well as treatment modalities developed through experience with Vietnam combat veterans to other stress reactions has proven to be quite beneficial. Victims of rape, physical abuse, violent crime, natural disaster, accident, terminal illness, and survivors or significant other of suicide and death also appear to experience intrusive recollections, psychic numbing, detachment, startle responses and guilt. The personality and stress reaction characteristics obtained from the
MMPI profiles assessed within this research were thought to be quite valuable for assessment and intervention within these other populations. The MMPI similarities and differences could be an asset in the expansion of research and the development of theory and appropriate treatment procedures for victims of a wide range of psychological trauma.

Utilization of a comprehensive MMPI assessment for the various samples of trauma victims was thought to be of utmost importance. The need for a comprehensive assessment was inherent in Penk's (1981) statement that elevation of a MMPI clinical scale can be multicausal. The lack of a comprehensive assessment can lead to a false conclusion that similar dynamics exist within different profiles that present similar clinical scale elevations. Analysis of subscales and critical factors is thought to be necessary to differentiate the particular dynamic(s) that precipitated a specific clinical scale elevation. Comprehensive assessment also entailed the utilization of varied instruments allowing assessment of concurrent validity. Rorschach profiles of the PTSD sample reported in this research were collected by another researcher. Considerable consistency was discovered between clinical, MMPI, and Rorschach data. The Rorschach data reflected a significant level of painful affect, anger and emotional constriction, but without any distortion of reality. Atypical content, such as numerous references to explosions, blood, and injured bodies, was also present. This content clearly reflected the veteran's experiences and would have been misconstrued were a traumatic history not taken and considered. The Rorschach profiles provided a source of concurrent validity and
constituted a valuable addition to the MMPI profile in support of the theory of a reality-based traumatic reaction as opposed to the theory of a reality-distorting psychotic or characterological process. The Rorschach data has yet to be compiled and subjected to statistical analysis and is thought to be a research area that presents considerable potential.

Another area of future research is the applicability of utilizing the MMPI or other psychological instruments that are useful for assessing the dynamics of PTSD for assessing the progress of treatment. Pre and post treatment MMPI mean sample profiles were not available. Several individual case utilizations of the MMPI pre and post treatment indicated a correlation between a clinical assessment of successful intervention and the decline of the elevated clinical scales below a T score of 70. Using the MMPI as a measurement of treatment progress would certainly be a valuable contribution to the treatment of PTSD.

The effect of PTSD upon an individual's reaction to subsequent stress events is an area of practical concern. Clinical observation of the level of intense reactions PTSD veterans had to the daily stresses of work, school, marriage and family as well as to extreme stressful events of loss of employment, divorce, serious illness, or death has precipitated a concern for the long term effects of PTSD upon coping abilities. This avenue of research would be especially applicable to the varied forms of stress-related or aggravated health disorders. The aforementioned MMPI profiles obtained from combat veterans of other wars were generally collected in reference to referrals concerned with
reactions beyond the normative range to life stresses such as retirement, medical disability, or medical rehabilitation. A common theme was that the immediate experience of loss, such as retirement, or confrontation with death, such as heart attack or stroke, presented a triggering event that precipitated the reemergence of the original trauma symptoms. A personal concern, which at this time has no empirical foundation, is the possible pejorative affect of a long term untreated PTSD condition upon social and marital maladjustment, hypertension, cardiac and gastrointestinal problems. A comparison between the incidence of heart attacks, strokes, ulcers, hypertension and other stress related health problems among PTSD veterans and among a nonveteran population is considered an important area of future inquiry.

A final factor underlining the importance of research in the area of traumatic stress reactions is the prevalence of trauma-related problems within daily life experiences. One only needs to consider the emotional impact that trauma has upon the prevalent psychological problems present within our culture. Rape crisis, domestic violence, crisis hotlines and natural disaster centers are growing in increasing numbers. The deleterious effects experienced by holocaust, natural disaster and combat veterans are becoming more evident. Recent uncoverings of child sexual assault, kidnappings, rape, violent assault, hostage occurrences and terrorism are prevalent within the media. Cultures that exist in countries such as Israel, Lebanon, Afghanistan, Poland, Ireland, El Salvador and Third World Countries abound with trauma. Airline crashes, Three Mile Island, flooding in Utah, the
Iranian hostage situation and the bombings of the Marines in Lebanon prove that our country is not immune from trauma. It is certainly the challenge as well as the responsibility of the behavioral sciences to understand the psychological, interpersonal and cultural impact of such occurrences. The task is to prevent trauma when possible, to enhance resiliency to trauma when necessary, to react effectively to acute crises, and to assist the victims to emerge as survivors. The example of the struggle of the Vietnam combat veteran clearly indicates that to seek escape from the trauma through denial of the plight of its victims delays, magnifies, and inhibits understanding of the human reaction to trauma. Lack of understanding is an obstacle to positive remediation. Lack of remediation prolongs the tragic consequences of trauma through unnecessary prolonged suffering.
REFERENCES


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Appendix

Research Variables

Variables, as described by Graham (1977), included the following MMPI scales:

Validity Scales:
- Cannot Say (C)
- Lie (L)
- Atypical Response (F)
- Guardedness (K)

Clinical Scales:
- Hypochondriasis (Hy)
- Depression (D)
- Hysteria (Hs)
- Psychopathic Deviate (Pd)
- Masculinity-Femininity (Mf)
- Paranoia (Pa)
- Psychasthenia (Pt)
- Schizophrenia (Sc)
- Hypomania (Ma)
- Social Introversion (Si)

Research Scales:
- Anxiety (A)
- Repression (R)
Ego Strength (Es)
Low Back Pain (Lb)
Dependency (Dy)
Dominance (Do)
Social Responsibility (Re)
Prejudice (Pr)
Status (St)
Control (Cn)
Manifest Anxiety (MAS)
MacAndrew Alcoholism Scale (MAC)

Harris-Lingoes Subscales

Depression
Subjective Depression (D1)
Psychomotor Retardation (D2)
Physical Malfunctioning (D3)
Mental Dullness (D4)
Brooding (D5)

Hysteria
Denial of Social Anxiety (Hy1)
Need for Affection (Hy2)
Lassitude-Malaise (Hy3)
Somatic Complaints (Hy4)
Inhibition of Aggression (Hy5)

Psychopathic Deviate
Familial Discord (Pd1)
Authority Problems (Pd2)
Social Imperturbability (Pd3)
Social Alienation (Pd4A)
Self-Alienation (Pd4B)

Paranoia
Persecutory Ideas (Pa1)
Poignancy (Pa2)
Naivete (Pa3)

Schizophrenia
Social Alienation (Sc1)
Emotional Alienation (Sc1B)
Lack of Ego Mastery, Cognitive (Sc2A)
Lack of Ego Mastery, Conative (Sc2B)
Lack of Ego Mastery, Defective Inhibition (Sc2C)
Bizarre Sensory Experiences (Sc3)

Hypomania
Amorality (Ma1)
Psychomotor Acceleration (Ma2)
Imperturbability (Ma3)
Ego Inflation (Ma4)

Wiggins Content Scales
Social Maladjustment (SOC)
Depression (DEP)
Feminine Interests (FEM)
Poor Morale (MOR)
Religious Fundamentalism (REL)
Authority Conflict (AUT)
Psychoticism (PSY)
Organic Symptoms (ORG)
Family Problems (FAM)
Manifest Hostility (HOS)
Phobias (PHO)
Hypomania (HYP)
Poor Health (HEA)
BIBLIOGRAPHY


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