Chapter III

REVIEW OF LITERATURE
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In this study an attempt has been made to find out the psychological characteristics of combat-related post-traumatic stress disorder (PTSD). The development of high speed civilization has caused changes in the incidence of traumatic neurosis, in the way it manifests itself and in the way in which it is treated. For many centuries man failed to recognize that the fear surrounding the accident and the subsequent emotional reaction could cause a person to be ill. For the last 50 years many clinicians and investigators have directed their major efforts towards the area of post-traumatic stress disorder (PTSD). It is evident, however, that progress in the various fields is moving forward at different rates. In spite of a considerable amount of clinical and investigative endeavour, the general field of post-traumatic stress disorder (PTSD) has not made the progress expected of it.

A considerable body of research has consistently linked stress to illness. Combat stress, one of the most extreme forms of stress, has often been implicated in both psychological and somatic pathology. Increasingly, research has moved in the direction of more complex, multivariate models incorporating different kinds of psychiatric sequelae of
different types of traumatic events which may blur important differences among different types of PTSD.

The earliest explanations, in the 1800s, of conditions which we now recognize as neuroses following trauma were ones which postulated "molecular disarrangement", a vascular change in the spinal cord.

Brodie, in 1837, was probably the first physician to recognize that for some hysterical symptoms, "fear, suggestion, and unconscious simulation are primary factors" (Ziegler, 1962).

In the 1880s, Oppenheim was the leading exponent of the organic etiology of "traumatic neurosis", while Charcot, pointing to the resemblance of the symptoms to the changes seen during hypnosis, hypothesized a psychogenesis of this condition.

The idea of organic damage to the nervous system persisted, nevertheless, during World War I in the term "shell shock", a term coined by Col. Frederick Mott (1919), suggesting that the cumulative effects of noise and shock waves had caused damage to the central nervous system.
Psychoanalysts began to illuminate the psychological processes underlying these conditions largely from questions raised about the meaning of one of their features, the repetitive post-traumatic dreams.

Freud (1920) wrote, "The dreams are endeavouring to master the stimulus retrospectively by developing the anxiety whose omission was the cause of the traumatic neurosis". This he attributed to an "obedience to the compulsion to repeat". Freud states that a severe injury would call forth narcissistic hypercathexis of the injured organ. This, he said, would bind the quantity of sexual excitation, which would develop because of the lack of preparation for anxiety and as a response to the trauma.

Out of World War I came a noted psychiatrist named Abram Kardiner (1941), who did exhaustive research with the victims of traumatic neurosis in the both World Wars. He developed a theory in the field of ego psychology. He went to great lengths to discuss the function of the ego and how they were affected by the sudden onset of trauma. He discussed the adaptive processes of the organism and the attempts of the organism to achieve psychic equilibrium after trauma. "The traumatic experience can precipitate any of the well-known types of neurotic or psychotic disorders", he wrote. "However,
irrespective of the nature of the resulting clinical picture, the distinctive features of traumatic neurosis are always present".

Grinker and Spiegel (1945), in their book "Men Under Stress", emphasized the factor of ego psychology and the effect of trauma upon ego. All individuals are susceptible to this condition, they state. How severe the neurosis will be depends on the person's pre-traumatic patterns.

Eliasberg (1941) felt that the social factors involved in the problem of traumatic neurosis were so great that it should be called a "social neurosis". Thus further emphasis was put on interacting social factors and psychological motivations.

Modlin (1960) emphasized the point that physical injury per se cannot cause a neurosis, with the possible exception of brain injury. The psychological reaction to the injury, not the injury itself, causes the neurotic phenomena.

Leopold (1962) stressed that an individual exposed to a trauma suddenly finds himself "changed from an independently operating adult to a dependent, hurt, and often eventually rebellious individual". There is difficulty adjusting to a
force that threatens his life or limb, which often causes a major personality upheaval. Leopold feels that the psychological factors surrounding the trauma itself are the major factors in traumatic neurosis; the previous personality or factors subsequent to the injury are not the definitive influences in the development of this condition.

However, Keiser (1968) stated that a larger element that adheres to a psychogenic etiology of traumatic neurosis is divided into three groups. One group considers the traumatic neurosis a complete entity unto itself with little regard for factors of pre-traumatic personality or secondary gain. A second group looks upon this neurosis as a type of malingering, albeit unconscious, with desire for compensation and dependency gratification as the primary factor. The third group stresses the pre-traumatic personality as the key to the whole problem, with little regard for the accident or for the post-traumatic situation.

In World War II, Grinker and his colleagues (Grinker and Spiegel, 1945) further described and classified disorders that were reactive to the stresses of combat. The irreducible conclusion from their work was that "no matter how strong, stable or normal a man might be, with sufficient stress, he will develop a war neurosis".
In 1955, Brill and Beebe reported a psychiatric follow up five or six years after breakdown on a sample of 985 US military personnel of World War II admitted for psychoneurosis. They found 8% to have severe disability, and another 20% moderate disability at follow up. There was evidence that symptoms were more persistent when the breakdown had occurred in combat, in contrast to Kalinowsky, they felt that compensation itself had little effect upon follow up status.

Futterman and Pumpian Mindlin (1959) observed that cases of war neurosis were still coming into the Veterans Administration Hospital 5 years after World War II had ended. He stated that 10 per cent of all the cases being closed were classified as war neurosis, even at such a late date. They described a clinical picture of intense anxiety, recurrent battle dreams, startle reactions to loud noises, tension, depression, guilt, and a tendency to sudden, explosive, aggressive reactions. Secondary symptoms were the tendency to avoid people, a fear of exposure to criticism, difficulty in making decisions, and various types of sleep disturbances.

Archibald and Tuddenham (1965) reported a 20-year follow up study, on five groups of subjects and over a longer interval, using a written biographical questionnaire and MMPI personality inventory in addition to psychiatric interviews.
A clear-cut picture emerged of combat veteran's chronic stress syndrome, a severely disabling condition characterized by irritability, jumpiness, difficulties in concentrating and in memory, wakefulness, fatiguability, depression, dizziness, abdominal discomfort, sighing, shortness of breath, sweating, etc., and accompanied by difficulties in work and family relationships, impaired efficiency, social isolation, and narrowing of interests. The causal factors presumably include the preexisting personality, the nature and severity of the stress, and the kind, intensity, and timing of poststress treatment.

Leiken (1965) noted the typical clinical picture of traumatic war neurosis in several airmen while they were still in training. He reviewed the history of the understanding of this syndrome with particular attention to the World War II contributions of Brill and Beebe (1955). The typical case was characterized by tremor, hyperacusis, startle, diarrhoea, and sleep disturbance marked by recurrent nightmares of the precipitating event. The patient was apt to react with explosive aggressive outbursts. Leiken was impressed by the recurring presence of a history in which the central theme was disturbed relations to authority. This history was strikingly similar to findings of a study by Brill and Beebe (1955) from World War II, cited by Leiken, in which such predisposition
meant 7 to 8 times greater probability of breakdown than for men with previously well-integrated personalities.

In their study of psychiatric casualties from World War II, Grinker and Spiegel (1945) categorized cases of combat neuroses into five major types: free anxiety states, phobic states, conversion states, psychosomatic reactions, and depressions. After combat, persistent psychopathology was noted and categorized into five major types: passive-dependent states, psychosomatic states, guilt and depression, aggressive and hostile reactions and psychotic like states.

Strange and Brown (1970) in their study compared fifty patients who developed psychiatric problems after return from tours of Vietnam combat duty with a group of patients who had not had such duty. The Vietnam returnees reported more conflicts in intimate relationships and had a higher incidence of depression and somatization than did the non-combat group. Although the returnees manifested more aggressive and suicidal threats, they did not evidence more direct aggressive or suicidal behaviour. He suggests that although Vietnam returnees face significant readjustment stress, their reactions are generally internalized and their potential for violent aggression is no greater than in those without Vietnam experience.
Merbaum (1977) readministered the MMPI and intensively interviewed a group of 17 Israeli soldier-psychiatric casualties of the Yom Kippur War a year after they had been discharged from a psychiatric ward. A comparison between the hospitalization and post-hospitalization MMPI profiles yielded no significant difference on any of the scales. Thus, the degree of emotional distress experienced by these veterans continues to be extraordinarily high and is characterized by extreme depression, anxiety and extensive physical complaints. The interview reports were completely consistent with the MMPI data. These data emphasize the prolonged effect of combat stress and highlight the special problems that these men face in re-entering their social community.

Nace, Meyers, O'brien, Ream and Mintz (1977) evaluated the incidence of depression in a sample of 202 Vietnam veterans on an average of 28 months after their return from Vietnam. Approximately one-third of the sample fell within the clinically depressed range of the Beck Depression Inventory. Comparison of the depressed and non-depressed groups indicated that the former had higher frequencies of drug abuse (particularly while in Vietnam), more marital difficulties, a higher unemployment rate, and more current legal problems. This high incidence of depression, coupled with the finding
that few of these men were being treated for the illness, indicate the need for an outreach approach to this population.

Malloy, Fairbank and Keane (1983) state that there appears to be a high incidence of post-traumatic stress disorders (PTSD) in Vietnam veterans. Yet there is little information available on the reliability and validity of any approach to the assessment of these combat-related stress disorders. The present study is designed to determine if responses to the presentation of mild combat stimuli would distinguish the following three carefully matched groups of veterans: (a) those with an exclusive diagnosis of PTSD, (b) in-patients in a psychiatry ward who clearly do not have PTSD and (c) Vietnam veterans with combat experience who are currently well adjusted. Behavioural, physiological, and self-report measures of anxiety obtained through this laboratory based assessment clearly distinguished the PTSD veterans from the remaining two critical comparison groups.

Fairbank, Keane and Malloy (1983) state that as there is a high incidence of PTSD among Vietnam combat veterans; yet, there is little information available on the utility of traditional psychological inventories for assessment of this disorder. In their study they examined whether responses on a variety of standardized psychological inventories (The MMPI,
Beck Depression Inventory, Zung Depression Scale, State Trait Anxiety Inventories and Fear Survey Schedule-II) would distinguish three carefully matched groups of Vietnam veterans---(a) those with an exclusive diagnosis of PTSD, (b) those with other non-psychotic psychological diagnoses, and (c) those with combat experience who are currently well adjusted. Univariate and multivariate statistical analyses indicated that the assessment battery was able to discriminate with good success Vietnam combat veterans with PTSD from relevant comparison groups.

Sierles, Chen, McFarland and Taylor (1983) reported 25 combat veterans hospitalized for treatment of PTSD were evaluated for the presence of other disorders. Of these 25, all were men; 24 were Vietnam combat veterans, and one was a Korean war veteran. Their ages ranged from 31 to 51. Six patients were single, eight married; and eleven separated or divorced. Fourteen patients (56%) met operationally defined criteria for one additional diagnosis, five (20%) for two additional diagnoses, and two (8%) for three additional diagnoses. The coexisting syndromes included alcoholism, drug dependence, antisocial personality disorder, somatization disorder, endogenous depression, and organic mental syndrome. The authors caution that neither the stress disorder nor the coexisting syndrome should be considered the primary condition;
clinicians should screen patients with stress disorders for other conditions and treat them when possible.

Modlin, Herbert C. (1983) examines the dynamics involved in traumatic events, providing a historical involved perspective and presenting symptoms and treatment of specific clinical syndromes. These specific syndromes include post-traumatic stress disorder, conversion disorder, somatization disorder, dependency reaction, rape trauma syndrome, and reactions to large-scale disasters. When patients experience some of these disorders as a result of their employment, the psychiatric fee is generally covered by workers' compensation insurance, however, the worker-patient may be caught in the dehumanising process of dealing with a skeptical insurance company and losing work and status simultaneously. As a result of accidents, some patients may experience secondary gains — the securing of privileges and exemptions due to the illness. Yet, some individuals develop psychiatric disorders as a result of an accident, especially if the accident is sudden and frightening, with little or no physical damage. The resulting psychiatric damage depends on the strength of the personality. The psychiatrist may also be faced with legal situations involving product liability, the extent of disability of an individual, determination of the causation of psychiatric stress and predisposition to neurotic breakdown.
Foy, Sipprelle, Raeger, and Carroll (1984) reported forty-three Vietnam veterans seeking psychological services at a Los Angeles Veterans Administration Medical Center were assigned to positive and negative groups of post-traumatic stress disorder (PTSD) based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-III; American Psychiatric Association, 1980). 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, chronic PTSD. In addition groups were compared on profiles from the MMPI and a psychological problem checklist. Result of multiple regression analyses demonstrated that combat exposure and, to a lesser degree, military adjustment were significantly related to PTSD symptomatology, whereas premilitary adjustment was not discriminant function analyses showed that the MMPI had moderate ability to correctly classify subjects on the basis of PTSD diagnosis. However, problem checklist items indicative of anxiety based disorders, particularly generalized anxiety and pervasive disgust, formed a discriminant function that correctly classified more than 90% of study subjects results were discussed in terms of implications for an empirically derived conceptualization of PTSD and further research directions.
Keane, Malloy and Fairbank (1984) had done study on the psychological assessment of post-traumatic stress disorder (PTSD) in Vietnam combat veterans. They focus to develop empirically based criteria for use of the Minnesota Multiphasic Personality Inventory (MMPI) to aid in the assessment and diagnosis of PTSD. Two hundred patients were assigned to either a PTSD group (n = 100) or to a non-PTSD control group (n = 100). Standard clinical profiles demonstrated that the PTSD group had overall higher mean elevations and an 8-2 configuration. A discriminant function analysis based on an empirically derived decision rule correctly classified 74% of the patient in each group. A special PTSD subscale was developed and cross-validated that improved diagnostic hit rates to 82% of the patients. The discriminant validity of the diagnosis of PTSD and the use of psychological tests in the assessment of Vietnam combat veterans are discussed.

Lund, Foy, Sipprelle and Strachan (1984) reported although symptoms of post-traumatic stress disorder are expected to persist for many years, there is often no systematic assessment of Vietnam veterans, combat experiences. A study of 43 help-seeking Vietnam veterans revealed that a reliable assessment of war trauma, the combat exposure scale, could be constructed from dichotomous questions about seven stressful events. Scale scores related significantly to
current diagnosis of PTSD and intensity of symptoms. The Guttman scaling technique resulted in an ordering of events that provides clinically relevant information about the nature of trauma in the Vietnam war.

Davidson, Swartz, Storck, Krishnan and Hammett (1985) reported a family history of 36 patients with chronic post-traumatic stress disorder and revealed a positive history of familial psychopathology in 66% of the patients. Alcoholism, depression, and anxiety disorders were the disorders most commonly found. The patients also had a higher prevalence of alcoholic siblings than did a retrospectively derived control group of depressed and anxious male patients. With respect to the proportion of familial anxiety or familial depression, the probands with PTSD more closely resembled probands with generalized anxiety than probands with depression. Every patient had experienced at least one significant psychiatric illness during his lifetime, most commonly alcohol abuse or depression.

Weil Frederic (1985) suggests that during war, as well as during civilian catastrophes, individuals are exposed to exceptional external aggression. This can cause physical injuries that objectively threaten the individual's survival. The psychological experience of the threat to soldiers, lives or
the lives of their comrades can shatter self-images and the image of their position in the world. The need to make decision with moral implications can arouse anxiety and some of the steps taken may leave the soldier with feelings of remorse and self-rejection. Reactions to stress are also influenced by the strength of the existing defence mechanisms. These reactions depend on the general resistance of the soldier at the movement of aggression. War stress can cause reactions of petrification or uncontrolled actions that ignore apart of the immediate surrounding reality. A neurotic superstructure can manifest itself from the beginning. Later, the soldier tries to restructure a new identity, but these attempts remain influenced by the recent aggression and will often leave behind vulnerability and dependency, which can cause delayed neurotic decompensation.

Laufer, Brett and Glops (1985) used DSM-III criteria and clinical models of stress to identify discrete dimensions of PTSD. The authors test the hypothesis that war trauma differentially affects four dimensions of post-traumatic stress intrusive imagery, hyperarousal, numbing, and cognitive disruption -- by studying data from 251 Vietnam veterans probability sampled in seven sites. The hypothesis was confirmed. Different dimensions of stress symptomatology are found to vary across individuals exposed to different types of
war trauma. Stress responses to war trauma also differ by race of the veteran. The relationship between stressors and symptomatology change over time, indicating specific experiences are related to particular long-term patterns of PTSD.

Horowitz, M.J. (1986) reported the sign and symptoms of response to a stressful life event are expressed in two predominant phase. The intrusive state, characterized by unbidden ideas and feelings and even compulsive actions, and the denial state, characterized by emotional numbing and construction of ideation. In this review of stress response syndromes, the author outlines those phases, discusses the DSM-III diagnoses for stress response disorders, and considers the mutual etiology effects of stressful life events, psychiatric disorders, and preexisting conflicts or functional deficits, guidelines for brief dynamic psychotherapy for transient support are presented.

Friedman, Schneiderman, West and Corson (1986) reported two scales developed to assess combat exposure and post-traumatic stress disorder symptomatology in Vietnam veterans displayed very high reliability. Each subject was assessed with combat exposure; PTSD symptomatology scales; SCL-90; the satisfaction with Life Domains Scale; Bradburn Affect Balance
Scale; and Social Readjustment Rating Scale. High levels of PTSD were associated with more current life stresses and other standardized indices of dysphoria.

Hyer, O’leary, Saucer, Blount, Harrison and Bouwewyns (1986) reported an extension of previous research on distinctions among Vietnam combat veterans and other similar veterans. Efforts were made to distinguish among three types of in-patient veterans: (a) those with a diagnosis of post-traumatic stress disorder (PTSD) and combat experience; (b) those with a diagnosis other than PTSD and with combat experience; (c) non-PTSD, non-combat patients. Two hundred Vietnam era veterans were administered an assessment battery within 2 weeks of admission. The battery included background variables, preservice ratings, service ratings, current adjustment ratings, and psychometric variables. Results showed no differences among the groups on premorbid variables. PTSD veterans, however, responded in a more pathological direction on psychometric and adjustment variables. A discriminant analysis using these variables correctly classified 85% of the veterans in the three groups. Also, the PTSD of the MMPI subscales was cross-validated. Last, for the total combat veterans group, time spent in combat was highly correlated with a variety of PTSD variables.
Solkoff, Norman, Gray, Philip and Keill, Stuart (1986) studied 50 Vietnam combat veterans who had been diagnosed as having PTSD were compared with 50 Vietnam combat veterans without PTSD (mean age of all subjects 35.06 years). The two groups were evaluated with a structured interview, and assessments were made of childhood and family histories, immediate preservice experiences, combat experiences, and post-charge experiences. The two groups differed significantly in the intensity of their combat experiences and their perceptions of their home coming experience. Neither early history nor immediate preservice factors differentiated the two groups.

Jordan, Harold. W., Howe, Gary L., Gelsomino, Joe and Lockert Edna, W. (1986) reviews the diagnostic criteria for PTSD; the difference between acute and chronic or delayed forms of PTSD; and the incidence of legal difficulties, substance abuse, marital problems, and poor work histories among Vietnam veterans. The differentiation of PTSD from antisocial personality disorder is discussed in support of the same three case histories are presented of 32-45 year old black veterans who used PTSD as a psychiatric defence in legal proceedings against them.

Davidson, Kudler and Smith (1987) assessed personality variables in 30 patients with chronic PTSD. World War II, Korean War (WW II/KW) veterans with PTSD were significantly
more introverted and neurotic than 16 age-matched non-psychiatric controls, whether or not the controls had been in combat. WW II/KW subjects scored significantly higher than Vietnam war subjects on both introversion and Denial (Lie) scales of the Eysenck Personality Inventory - Form A. PTSD subjects were significantly more neurotic than 17 major depressive subjects.

Solomon, Mikulincer and Hobfoll (1987) studied combat intensity, social support, and related stress reactions were studied among two subject groups: 382 soldiers who experienced combat stress reaction (CSR) during the 1982 Israeli-Lebanon war and a matched control group of 334 soldiers who participated in the same military units but who did not experience CSR. Both objective and subjective indicators of stress and social support were predictive of CSR. Subjective indicators, however, were stronger predictors than objective indicators. Soldiers who later developed PTSD were more likely to have had CSR, to perceive themselves as having been in more intensive combat, and to have perceived themselves as receiving less social support than soldiers who did not develop PTSD. The CSR was clearly the best predictor of PTSD. The effect of the objective versus the subjective experience of stress and social support is discussed.
Hamilton, Canteen, Beigel and Yost (1987) administered questionnaires, which included a 15-item-symptom checklist containing items from DSM-III PTSD criteria, to 32 surviving male World War II naval veterans. Results show that 5 subjects (mean age 62.5 years) met the screening criteria for PTSD; the mean age for non-PTSD subjects was 62.6 years. The 2 groups differed in the number of years of military service and ratings of helplessness and hopelessness; the PTSD groups mean ratings on symptoms of helplessness and hopelessness was significantly higher than those for the non-PTSD group. The reported ratings of nervousness and tension did not differ significantly.

Green and Berlin (1987) investigated the relative contribution of specific preservice, service, and post-service psychosocial variables to severity of post-traumatic stress disorder (PTSD) in 60 Vietnam veterans were surveyed; intensity of combat experienced in Vietnam, current subjective impact of the stress of Vietnam experiences, current level of life stress, extent and nature of social support available to the veteran during the 1st year of return from Vietnam, and pre-service psychosocial functioning. A stepwise discriminant function analysis revealed that combat intensity, current impact of previously experienced events in Vietnam, and current level of life stress correctly classified 75% of the total cases. Findings were supported by tests of correlation and
stepwise regression analysis. Current level of life stresses, especially disruption in the interpersonal relationships, were associated significantly with PTSD.

Soloman, Garb, Bleich and Grupper (1987) conducted an exploratory study of the nature and course of reactivation of combat-related PTSD, experienced psychiatrists independently assessed 35 Israeli men (aged 28-39 years) with recurrent combat-related PTSD. Subjects were identified as having combat-related PTSD during/after the 1982 Lebanon war. Two major types of reactivated PTSD, each representing a different degree of pathology, were delineated; uncomplicated reactivation and heightened vulnerability. The second category was further subdivided into specific sensitivity, moderate generalized sensitivity, and severe generalized sensitivity. Case report illustrate each type and category. The authors conclude that reactivation of war related trauma is a complex phenomenon that may take different form.

Card, Josefina J. (1987) surveyed a cohort of 1,500 men who completed high school in 1963 to compare the incidence of PTSD among 500 Vietnam veterans, 500 non-Vietnam veterans and 500 non-veterans. At age 36 years, Vietnam veterans reported significantly more problems related to nightmares, loss of control over behaviour, emotional numbing, withdrawal from the
external environment, hyperalertness, anxiety, and depression than did their classmates. These problems were found to correspond closely to the disorder labelled PTSD. PTSD was associated with other family, mental health, and social interaction problems. Some environmental variables -- such as the presence of a spouse or being a churchgoer -- were associated with reduced levels of PTSD or with reductions in the degree of association between combat and PTSD. It is postulated that support factors can help some Vietnam veterans with PTSD.

Belenky, Gregory L. (1987) described maladaptive reactions to combat ranging from immediate reactions through acute, delayed, late, and chronic reactions, including PTSD. It is argued that because case symptoms blend into one another, these varied reactions are not separate clinical entities, but rather indicate a Combat Reaction Spectrum Disorder (CRSD). Diagnostic evidence for this condition in Israeli soldiers who fought in two wars in the Middle East (1973 Arab-Israeli war and the 1982 Lebanon war) is described, and factors associated with combat effectiveness that help prevent CRSD are presented. Treatment approaches to CRSD are noted, including unit remoralization, reintegration, and reconstitution.
Solomon, Weisenberg, Schwarzwald and Mikulincer (1987) assessed the prevalence, type, and severity of PTSD in a large representative sample of Israeli soldiers who had been treated for combat stress reactions one year after the 1982 Lebanon war. Comparisons were made with a group of soldiers who had fought in the same battles but had not been treated for this reaction. A dramatically higher percentage of soldiers with combat stress reaction (59%) than of soldiers without combat stress reaction (16%) developed PTSD. Age was significantly associated with PTSD. The authors discuss the differential quality of PTSD among the groups as well as factors facilitating recovery.

Breslau, N., Davis, G.C. (1987) reported post-traumatic stress disorder (PTSD) was officially introduced into psychiatric nomenclature in 1980, when it was incorporated into DSM-III. There is as yet little empirical research on the validity of the diagnosis. Literature on disasters, civilian and wartime, and on more ordinary stressful life events does not support the view that extreme stressors form a discrete class of stressors in terms of the probability of psychiatric sequelae or the distinctive nature of subsequent psychopathology. Extraordinary stressors are like more ordinary stressful events with respect to their complex differential effects upon individuals. Personal characteristics and the
nature of the social environment modify the likelihood and form of the response of individual to all types of stressors.

Breslau and Davis (1987) examined the effects of wartime stressors in a sample of 69 Vietnam veterans who were psychiatric in-patients in a Veterans Administration Hospital. Participation in atrocities and the cumulative exposure to combat stressors, each independently of the other, conferred a significant risk for post-traumatic stress disorder. In contrast, the effect of these war experiences on the onset of panic, major depression, and mania was not significant. The results indicate that extreme stressors are uniquely linked with post-traumatic stress disorder's characteristic cluster of symptoms but challenge DSM-III's implicit assumption that the reexperienced trauma is the stressor responsible for PTSD.

Lawrence A. Palinkas and Patricia Coben (1987) stated that although the post-traumatic stress disorders of Vietnam veterans have been well documented, the psychological and environmental factors that gave rise to these and other psychiatric disorders remain to be clearly identified. The object of their study is to determine if United States Marines who were wounded in action in Vietnam were also at risk for an in-patient admission with a psychiatric disorder. We also wish to examine the effect of the practice of returning psychiatric
patients to duty upon completion of treatment on the relationship between combat exposure and psychiatric distress. Records of all hospital admissions for active-duty marines for the period 1965 to 1972 were examined and personnel having a combat related wound or injury and/or a psychiatric hospitalization were identified. Rates of first hospitalization were calculated and standardized incidence ratios were used to obtain measures of risk. Results indicated that, compared with Marines not wounded in Vietnam, Marines wounded in Vietnam were at significant risk for having a psychiatric hospitalization. Most of the psychiatric first hospitalization occurred before being wounded in action, however, and psychiatric patients who were treated and then returned to duty had a significantly greater than expected risk of being subsequently wounded. This risk differed with respect to psychiatric diagnosis due to variations in the practice of returning psychiatric patients to duty on the basis of primary diagnosis. Variations in the probability of being returned to duty also accounted for variations in the relative risk of psychiatric first hospitalizations among wounded Marines by diagnostic category. These results call into question the validity of using ratios of psychiatric casualties to numbers of wounded personnel as measures of the relationship between combat exposure and psychological distress.
Solomon, Mikulincer and Bleich (1988) assessed the clinical picture of two groups of Israeli soldiers: frontline soldiers who had been treated for combat stress reaction during the 1982 Lebanon war (n = 382); and matched control frontline soldiers who did not sustain combat stress reaction (n = 334). Subjects were screened one year after the war for PTSD and psychiatric symptomatology using the symptom checklist-90 (SCL-90). Results indicated that anxiety, depression, hostility, and obsessive-compulsive problems were the most salient features of PTSD among combat stress reaction casualties. The contribution of DSM-III criteria as well as their limitations in the diagnosis of PTSD discussed.

Solomon, Benbenishty and Mikulincer (1988) examined a sample of 104 Israeli soldiers diagnosed as suffering from combat stress reaction (CSR) ("battle-shock") during the 1982 Lebanon war by mental health clinicians a year after the war. The clinicians assessed (a) PTSD as defined in the DSM-III 1980, (b) associated psychological symptoms (somatization, anxiety, and depression), and (c) disturbances in post-war functioning. The clinicians collected background information on sociodemographic characteristics, premilitary and military adjustment, combat experiences, and the extent of the CSR episode. The analysis indicated that PTSD could be predicted fairly well by the extent of the CSR episode and specific combat experiences.
while the psychological symptoms were predicted mainly by combat experiences, and post-war functioning was predicted mainly by prewar factors. The implication of combat experiences and soldiers' immediate reactions during combat in the genesis of subsequent PTSD is discussed. The multifaceted nature of war-related psychological sequelae is discussed.

Woolfolk and Grady (1988) evaluated sixty-one Vietnam veterans who had sought out-patients psychological services for post-traumatic stress disorder (PTSD) during the two independent diagnostic interviews. Data were analysed from only those 48 subjects for whom the two diagnoses agreed upon the presence or absence of PTSD. Subjects were administered the symptom checklist-90-R (SCL-90-R), a modified version of the Impact of Event Scale, and two measures of combat stress: the Combat Scale Revised and the Vietnam Experience Scale. Some support was generated for the reliability and validity of the PTSD construct as outlined in DSM-III. In our sample the diagnosis of PTSD was associated with excessive arousal characterized by anxiety, anger, paranoid ideation, intrusive images, and avoidance of stimuli reminiscent of the traumatic stressor. The findings are discussed in relation to previous studies of combat related PTSD and studies of traumatically stressed civilians.
Philip A. Saigh (1988) reported the course of self-reported anxiety, depression, and assertion which was charted 63 days before 12 students were exposed to a significant war-related stressor as well as 8, 37, and 316 days later. Although the majority of respondents reported higher levels of anxiety and depression as well as lower levels of assertion 8 days after the trauma, the estimates observed 37 and 316 days after the trauma were not significantly different from the estimates observed 63 days before the trauma. A single case analysis as well as a series of diagnostic interviews revealed, however, that one of the students developed chronic post-traumatic stress disorder. The results are examined from an epidemiological and etiological perspective.

Watson, Kucala, Manifold, Vassar and Juba (1988) determined whether they differ from one another in important ways. The authors compared post-traumatic stress disorder (PTSD) victims who reported delayed onsets with those who claimed undelayed onsets on PTSD symptom self-ratings. MMPI clinical and validity scale scores, stress histories, and repression measures. The number and the size of the differences did not exceed chance expectations and did not support the establishment of separate delayed and undelayed onset PTSD categories in the diagnostic manual, nor did they support the hypotheses that the delay, when it appears, is attributable
to the magnitude of the trauma, the severity of the symptoms, repression, or a limited stress history.

Solomon, Mikulincer and Avitzur (1988) examined the relations between coping, locus of control, and social support and combat-related post-traumatic stress disorder (PTSD). The sample consisted of 262 Israeli soldiers who suffered a combat stress reaction episode during the 1982 Lebanon war and were followed 2 and 3 years after their participation in combat. Cross-sectional analysis revealed significant relations between locus of control, coping, and social support and PTSD at the two points of assessment. Changes in PTSD from Time 1 to Time 2 were also associated with changes in coping. We discuss theoretical and methodological implications of the findings.

Barrett and Mizes (1983) report that questionnaires were mailed to 110 Vietnam veterans, yielding 52 veterans who were blocked into 4 groups in a 2 (social support) x 2 (combat level) design. Home interviews were conducted and comparisons among the groups were made regarding presence of PTSD symptoms, depression, and other psychological disturbance. It was found that subjects who received high social support reported fewer symptoms and that subjects with high combat trauma reported more symptoms. A significant interaction between social
support and combat level was not found. Premorbid functioning was not found to differ among the 4 groups, suggesting little relationship to PTSD symptoms.

McCaffrey, Hickling and Marrazo (1989) investigated the psychological characteristics of civilians (N = 26) with a post-traumatic stress disorder (PTSD) in order to determine whether the assessment and diagnostic decision rules developed using the MMPI with combat-related PTSD apply to civilian-related PTSD. The results indicate that there are substantial differences between the two PTSD populations and that further research is warranted to delineate other qualitative and quantitative aspects.

Zahava Solomon (1989) assessed the long-term psychological sequelae of combat employing the Impact of Event Scale (IES) 1, 2, and 3 years after the 1982 Lebanon war. The following groups of Israeli veterans participated: combat stress reaction casualties (N = 213) and comparable controls (N = 116). For the purpose of the study, the subjects in each group were screened and further divided according to whether they did or did not suffer from PTSD. Results showed that elevated rates of distress were reported by both combat stress reaction and PTSD casualties at all three points in time. In
both study groups the level of distress declined with time. Theoretical and methodological implications were discussed.

Grady, Woolfolk and Budney (1989) were factor analysed responses of 142 Vietnam veterans on two frequently employed measures of combat stress. Four factors emerged, each of which represented an aspect of participation in activities within the Vietnam war zone. One factor in particular, abusive violence, was significantly related to postservice problems of adjustment and was the most powerful predictor of a diagnosis of combat-related PTSD. Our data suggest that unidimensional models of war zone stress that focus exclusively on exposure to life threat in combat situations are inadequate for characterizing important features of the Vietnam theatre that are related to subsequent psychopathology.

Stretch, R.H. (1991) conducted a survey study on the psychosocial readjustment of 164 of the estimated 10,000-40,000 Canadians who served in Vietnam with the US military. Results indicate significantly greater rates of PTSD compared with US Vietnam veterans. Evidence of other psychosocial adjustment problems such as depression, inability to handle frustration and anger, difficulty in getting along with and trusting others, and family and marital problems as well as poor physical health, was also found. Results suggest these
problems are due, in part, to prolonged isolation from other Vietnam veterans, lack of recognition, and no readily available treatment for PTSD in Canada.

Solomon, Mikulincer and Waysman (1991) examined the role battle experiences and personal resources play in the development of combat-related PTSD. For this purpose, battle experiences (battle stress, military unit environment) and personal resources (coping styles, casual attribution) were assessed two years after the 1982 Lebanon war in three groups of male Israeli frontline soldiers: (1) soldiers who sought treatment 6 months or more after the war (delayed PTSD); (2) soldiers who sought treatment during the war (immediate PTSD); (3) control soldiers. Findings indicated that both immediate and delayed PTSD casualties reported similar and higher levels of battle stress than control subjects. In addition, delayed PTSD casualties evinced less personal resources than control subjects, and immediate PTSD casualties evinced still less personal resources than delayed PTSD casualties. The theoretical implications of the findings were discussed.

Solomon, Mikulincer, Waysman and Marlowe (1991) report that delayed PTSD has been the focus of numerous clinical reports. Systematic investigations of this phenomenon are
practically non-existent, however Utilizing a unique psychiatric register developed by the Israeli Defence Forces in the 1982 Lebanon war, this study compared the clinical picture of three groups of veterans: (1) PTSD casualties who sought help at least six months after their exposure to combat; (2) PTSD casualties who sought help during the Lebanon war; (3) soldiers who emerged from the 1982 war without any diagnosable psychiatric disorder (controls). Significant differences were found in the clinical picture of the study groups. Both treated groups, the delayed and the immediate onset PTSD casualties, showed significantly more trauma-related intrusion and avoidance responses, more severe psychiatric symptomatology, more problems in social functioning, and lower perceived self-efficacy in combat than non-PTSD controls. However, the psychological and social adjustment of the PTSD veterans whose treatment was delayed was found to be significantly better than that of the immediate onset PTSD veterans. Implications of these findings and recommendations for further research into the significance of the time of onset are discussed.

Roszell, McFall and Malas (1991) examined the frequency of symptoms of post-traumatic stress disorder within each of three categories -- reexperiencing, avoidance or numbing, and physiological arousal in 116 Vietnam combat veterans with
a diagnosis of PTSD. The prevalence of all PTSD symptoms was greater than 50 per cent except for flashbacks, psychogenic, amnesia, and sense of foreshortened future. Comorbidity in a subgroup of 48 patients was assessed using operational criteria for DSM-III-R mental disorders. Mood disorders psychoactive, substance abuse disorders, and other anxiety disorders frequently co-occurred with PTSD, but psychotic disorders were uncommon. These findings provide empirical validation of the DSM-III-R diagnostic criteria for PTSD.

Feinstein and Dolan (1991) reported a prospective study documenting psychopathology undertaken in 48 subjects exposed to a range of physical trauma, but whose injuries were of similar severity. No support was found for the DSM-III-R view correlating the severity of the stressor with the development of post-traumatic stress disorder (PTSD). Distress post-injury (high scores on the impact of Event Scale), indicative of difficulty with cognitive assimilation of the traumatic event, was found to be highly predictive of psychiatric morbidity and PTSD at 6 months.

Guilani Panahi (1991) used Zung's (1971) Self-rating Anxiety Scale (SAS), the amount of anxiety was measured in veterans (n = 103) of Iran-Iraq war and a control group (n = 43). There was no significant difference between the mean
anxiety of the two groups. However, the total mean anxiety score for both groups was found to be significantly higher than Zung's index for normal adults. It was suggested that this could have been due to a higher level of anxiety in the population due to the heavy air and missile attacks of many residential areas.

The Need for the Study

The post-traumatic stress disorder is an universal phenomenon, sparing no class, culture, age and sex. Increasing attention has been focused on post-traumatic stress disorder as a clinical entity. It has probably received most recognition thus far in its acute and chronic form of PTSD. And exclusive attempts have been made to study the different psychological dimensions of post-traumatic stress disorder with regard to the etiology, symptoms and behavioural patterns. However, very few studies are available with regard to the characteristic expressions of post-traumatic stress disorder (PTSD).

The psychiatric response to stress varies not only with different types of stressors but also with different populations that experience similar stressors. Extensive clinical experience in several wars reveals that combat-related
PTSD takes more numerous and subtle expressions than those presented by DSM-III-R's broad categorization.

PTSD is a complex entity encompassing a large variety of manifestations that differ in quality and quantity from one group to another. The prevalence of this disorder in Iran after the war is very significant among soldiers as well as civilians. The cause for the onset may be varied and would complicate the behaviour. If the patient is not treated, it would have disastrous effects on the life of the individual and such people will be a problem to the family in particular and society and nation in general.

The need to study the various characteristic expressions of post-traumatic stress disorder, and reorient the war-affected Iranian population is more essential today, as the nation is at a crucial stage of development both economically and socially.

Aims of the Study

Many studies have been conducted to find out the possible psychological parameters associated directly or indirectly with the post-traumatic stress disorder.
The present study is an effort to delineate the characteristic expressions of combat-related PTSD among the war-affected Iranian population in the Iran-Iraq war. Employing the symptom checklist-90 revised version (SCL-90-R) and DSM-III-R criteria of PTSD, we attempt to evaluate the clinical picture of four groups of Iranian population affected directly or indirectly by the Iran-Iraq war. So also an attempt has been made to examine the relationship between PTSD and psychiatric symptomatology. And to study the effects of various demographic factors such as sex, age, occupation, education, family and social support and familial record of psychopathology, etc. on PTSD.