HUMANITY IN THE FACE OF INHUMANITY:

THE POW'S SEARCH FOR MEANING

THROUGH SUFFERING

by

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ABSTRACT

The early investigations of the effects of long-term stress on former POWs have suggested that POWs are currently suffering from numerous physical and psychological problems directly related to their captivity experiences. More recent authors have suggested that although former POWs were subjected to extreme suffering and pain, they may have benefited from this very stressful experience by achieving a more positive outlook on life and a new reason for living. Victor Frankl had earlier suggested a similar view regarding the discovery of a Purpose in Life through suffering.

The present study investigated the relationship between daily stress while a POW and the current purpose in life. Three groups of World War II veterans were studied: (a) former European Theater POWs; (b) former European Theater Combat veterans; and (c) former European Theater and United States stationed Non-combat veterans. The Purpose in Life test was used to assess purpose in life. The Daily Stressors Questionnaire was developed specifically for this study and was used to assess daily stress while a POW, in combat or while in the military service. The

Beck Depression Inventory was used to assess current levels of depression.

The results were as follows: (a) former POWs did not show evidence of increased levels of purpose in life as assessed by the Purpose in Life test, (b) former POWs did show signs suggestive of mild levels of depression as assessed by the Beck Depression Inventory, (c) Combat and Non-combat group members showed signs suggestive of the presence of purpose in life, and (d) a relationship between wartime daily stress and current psychological disturbances (BDI) was found, $r(123) = .48, p < .01$. Overall, Frankl's theories regarding the discovery of purpose in life through suffering were not supported.

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CHAPTER I

INTRODUCTION

During the course of World War II over 130,000 American soldiers were taken prisoner of war (Veterans Administration, 1980). The hardships of internment were extreme in many of the camps and over 14,000 POWs died in captivity. Today, the 81,000 remaining former POWs report a large number of physical and psychological problems which they attribute to the stress and suffering of internment and inhumane treatment by their captors.

Early researchers were well aware of the suffering that many POWs experienced during the war. Some of these researchers closely monitored the health of former POWs over time. They reported large numbers with severe physical and psychological problems. It was not until the end of the Vietnam Era and the return of that war's POWs that a new body of evidence began to emerge suggesting some potentially positive effects of captivity on some Vietnam POWs. A few of them, although subjected to extreme stress and suffering, reported positive changes in their outlook towards life and their reason for living. This very interesting phenomenon was first proposed by Victor Frankl

(1962), based upon his experiences in German concentration camps.

This study does not question the fact that many POWs suffered under inhumane conditions and are currently experiencing problems associated with their captivity. It does suggest the possibility, derived from current research, that some POWs may have benefited from their captivity experience by gaining a purpose or meaning in life as a direct result of their pain and suffering.

Survey of the Related Literature

> "He who has a why to live can bear with almost any how."
>
> Nietzsche

The study of severe trauma has been of interest to researchers for more than 40 years. High rates of psychological disturbance and disability among survivors of both natural and man-made disasters have been reported (Adler, 1943; Beebe, 1975; Dor-Shav, 1978; Eitenger, 1973; Erickson, 1976; Segal, 1974; Ursano, Boydstrun & Wheatley, 1981). Studies on World War II (WW II) prisoners of war (POWs) and concentration camp survivors make up the largest portion of survivor research. It is this body of research that is of primary relevance to the present study.

The Veterans Administration (VA) study (1980) of former prisoners of war concluded that two themes appeared continually in the literature concerning the POW experience:

the question of luck and the absence of self-determination. The United States Department of Defense report (1955) had earlier made this point clearly:

> Fighting men declare it neither dishonorable nor heroic to be taken prisoner. In the sense that the victim does not covet it, but finds himself unable to avoid it, capture is an accident. Often like a motor crash, it comes as a complete surprise. Often too, it is accompanied by injury. Nearly always the upshot is painful and in the very end it may prove fatal. And as is the case with many accidents, it is bad luck.
>
> Fighting men speak of the fortunes of war. In combat, luck cannot smile on all participants. Some are bound to lose. The man taken captive is one of the unlucky--a soldier of misfortune. That can be one definition for war prisoner (p. 1).

The act of becoming a prisoner of war during WW II was an event for which very few soldiers, airmen or naval personnel had been mentally prepared. Depending upon circumstances such as weather, location, captor's nationality, or the climate of the combat zone, different individuals' capture, subsequent internment and stress could be as different as day and night. For example, a prolonged march in -20 degrees Fahrenheit is very different from a forced prolonged march in weather of +90 degrees Fahrenheit. Furthermore, lack of clothing or foot protection could complicate matters even more (Klonoff, McDougall, Clark, Kramer & Horgan, 1976). Internment effects are especially noticeable when one looks at the very large differences in mortality rates between European and Pacific Theater POWs. The high (37%) mortality rate for Pacific Theater POWs,

and the low (1%) mortality rate for European Theater POWs is shown in Table 1. The differences in length of time spent as a POW are also pointed out in Table 1.

A large portion of the historical evidence on the psychological effects of the prisoner of war experience is derived from the numerous studies on Nazi concentration and extermination camp victims (Boder, 1954; Chodoff, 1963; Dimsdale, 1974; Dor-Shav, 1978; Eitenger, 1963; Segal, Hunter & Segal, 1976; Warnes, 1972). While the concentration and extermination camp experience was apparently different in degree from most POW camps, one being designed for extermination or labor and the other for incarceration, it is also recognized in the literature that the two experiences can be classed as being of the same general kind (Warnes, 1972; Veterans Administration, 1980).

Segal, Hunter and Segal (1976) pointed out that:

> . . . by common consensus, concentration camp survivors endured an experience unique in the annals of human history. Nevertheless, the behavioral consequences of concentration camp trauma can be seen as reflecting problems of readaptation which all former prisoners share (p. 599).

Baker (1980) supported this concept by noting: "Studies of prisoners held in military prisons or in concentration camps in World War II and onward to the present, have revealed an impact on health and behavior from captivity which is relatively constant across nations, wars and cultures" (pp. 57-58).

TABLE 1

NUMBER OF AMERICAN POWS

	Total WWII*	Pacific	Europe
Captured and Interned	130,201	34,648	95,532
Died While POW	14,072	12,935	1,124
Returned to U.S. Military Control	116,129	21,713	94,408
Estimated Returnees Alive on 1/1/1979	93,128	16,237	76,891
Percentage Died	11.0	37.0	1.0
Average Length of Stay (days)		1,148	347
Average Age at Capture		26.7	25.0
Average Age at Release		29.4	26.1

*Includes 21 POW's captured prior to their arrival in the Pacific and European Theater. Thirteen died while in captivity and 8 were returned to U.S. military control (Stenger, 1979).

Boder (1958) was one of the earlier researchers to study displaced persons in Europe following the end of World War II. During that same period, Cohen and Cooper (1955) conducted a study of former WW II POWs, which was later followed up by Nefzger (1970). Beebe (1975) included Korean conflict POWs in his study. All of these writers reported persistent psychological problems in their samples, including psychoneurosis and associated problems of depression, restlessness, instability, and startle reactions. This group of symptoms became known as the "concentration camp syndrome," or more commonly the K-Z syndrome.

Chodoff (1963) and Eitenger (1963) subsequently provided a thorough summary of the symptoms related to the K-Z syndrome. They reported that, in addition to those already described, such behaviors as insomnia, apathy, nightmares, specific phobias, frequent lapses of short-term memory, and concentration difficulties also frequently occurred. Still another K-Z symptom was what Chodoff (1963), Kijack and Funtowitz (1982), and Steinitz (1982) called "survivor guilt." This was described as a feeling of guilt for having survived when so many others died. It has been estimated that as many as 80% of former concentration camp inmates and POWs still suffer from the K-Z syndrome, most notably survivor guilt (Veterans Administration, 1980).

Wolf and Ripley (1947) noted that repatriated Pacific Theater POWs showed signs of emotional detachment as a part of the usual progression of the K-Z syndrome. These signs consisted of initial apathy, depression, and anxiety, followed by an emotional "bridge period" (Bettleheim, 1943), and then the reappearance of the original problems, sometimes many years later. Frankl (1962) and Bettleheim (1943) both discussed this "bridge period." It was said to be a period of time, one to ten years or longer after the traumatic event, during which there was little or no display of symptoms relative to captivity and stress.

In dramatic contrast to the earlier studies is the recent research of Ursano (1981), Wheatley and Ursano (1982) and Sledge, Boydstun and Rabe (1980). These authors reported that as many as 21% of former Vietnam era POWs indicated that they may have actually benefited from their POW experience in terms of outlook on life and related beliefs. Until recently, very few researchers had ever reported that captivity experiences, such as those suffered by POWs and concentration camp survivors, could also be growth experiences. Victor Frankl was an early exception. His concept of "meaning in suffering and death" (Frankl, 1962) provided an alternative way to look at the extreme pain endured by so many. His theory also provided therapists with a technique for providing assistance to the suffering: Logotherapy.

In summary, the results of internment and prolonged stress among concentration camp survivors and repatriated POWs appear to be consistent, especially in those camps controlled by the Nazi SS troops in Europe and the Japanese in the Pacific. The K-Z syndrome appears to be the best descriptor of survivor symptoms, unless one takes into consideration the more recent label applied to the similar syndrome called Post Traumatic Stress Disorder (Figley, 1978; Figley & Leventman, 1980; Wilson, 1980). Both disorders are characterized by depression, general anxiety, instability, restlessness, nervousness, startle reactions, and survivor guilt. Since this study is primarily concerned with WW II POWs, the K-Z syndrome is the more applicable, although the symptoms of Post Traumatic Stress Disorder (PTSD) also fit well.

Several recent authors (Anderson, 1975; Deaton, Berg & Richlin, 1977; Hunter, 1983; Johnson, 1983; Kentsmith, 1982; Ursano, 1981; Ursano & Wheatley, 1982) have supported the notion that survivors of extreme stress, such as that suffered by former POWs, may have benefited in some way from their experiences in captivity. Des Pres' (1976) book on the survivors of Nazi death camps supported this concept. It was most clearly expressed by a survivor he had interviewed: " . . . life is what counts, life whose internal destiny has had the peace and the time to unfold" (p. 200). The work of Frankl, perhaps the earliest

proponent of this construct, now needs to be reconsidered.

Man's Search for Meaning

Victor Frankl was born in Vienna and lived there for most of his life. He received his M.D. and Ph.D. degrees from the University of Vienna in 1930 and 1949 respectively. During the period of 1942-1945 he was interned in various German concentration camps, including Dachau and Auschwitz. His (1962) book, Man's Search for Meaning: An Introduction to Logotherapy, clearly described his gruesome prisoner existence and the various effects of internment on his fellow prisoners. He also discussed his concept of Logotherapy, or "meaning" therapy.

The focus of Frankl's theory is on the meaning of human existence as well as on man's search for meaning in life. According to Logotherapy, the striving to find a meaning in life (the will to meaning) is the primary motivational force within man. This is in contrast to Freud's Pleasure Principle and Adler's early concept of Will to Power. When one's "will to meaning" is frustrated, a form of neurosis tends to develop. Logotherapists refer to this as noogenic neurosis. Eventually, noogenic neurosis results in a belief that life is meaningless, which leaves the person with an inner void or emptiness. This inner void is referred to as an "existential vacuum." The resulting vacuum is not per se a neurosis or

abnormality, but is said to be a human condition. Frankl considers it to be the result of the machine age, with its attendant loss of individual initiative (Crumbaugh & Maholick, 1981). According to Frankl, psychiatrists working with former POWs at the close of WW II and the Korean conflict (Frankl, 1962) suggested that those prisoners who knew there was a task waiting for them upon release, who had a reason to survive, who found a meaning in life, and who experienced no existential vacuum were most apt to survive (Frankl, 1962, 1965).

In Logotherapy, it is possible to establish one's meaning in life in any one of three different ways: (a) experiencing a value, (b) doing a deed, or (c) suffering. Former prisoners of war were most likely to have discovered their purposes in life through suffering, since it was so widespread. Some prisoners, on the other hand, may have accomplished deeds or experienced a value while in captivity.

One of the main tenets of Logotherapy is that man's basic concern is not to avoid pain or gain pleasure, but rather to see meaning in life. Suffering ceases to have its prior negative effects at the moment a meaning is found for it. The meaning may be a sacrifice for others, or a discovery of personal humility. When one accepts the challenge to suffer bravely, life has a meaning which is retained until death. When meaning is attributed to

one's suffering or pain, one can then survive more easily. Similarly, acceptance is thought to occur in masochistic individuals, and to also affect their ability to survive pain and suffering.

Former POWs who found meaning through suffering, and who attributed survival to their own capacities to adapt, rather than to luck, deception or chance, may have benefited from their traumatic experiences, as hypothesized by Frankl. Consequently, they would no longer have an existential vacuum or void in their lives.

Purpose or meaning in life, including the absence of existential vacuum, is generally associated with normal or better functioning. Such a condition includes satisfaction, participation in organizations, and a life relatively free from depression and anxiety (Ruffin, 1984; Stropko, 1975). If a POW's well-being is related to having found purpose and meaning in suffering, as reported by psychiatrists after WW II and Korea (Frankl, 1962), then degrees of meaning should be measurable in former POWs. This variable should then prove to be positively correlated with current psychological and social functioning. Former POWs who endured great suffering and daily stress should report a higher purpose in life than those who suffered less or were under lesser amounts of daily stress while in captivity.

If Frankl's theory is correct, former POWs who endured

a great deal of stress and suffering may be expected to show more purpose or meaning in life than comparable groups of veterans who suffered less during their military service.

Other highly stressed groups could also be used to test Frankl's theory, such as cancer patients, trauma victims, or hostages. This study, however, is primarily concerned with former POWs.

In order for the relationship between prior POW suffering and current functioning, as posited by Frankl's theory, to be empirically determined, one would have to measure the purpose in life concept in a group of former POWs and assess the amount of suffering experienced by them. Purpose in life and daily stress can be assessed using the instruments discussed in the following sections. Since multiple psychological problems have been so frequently reported in this population, and since depression appears to be very common among POWs as reported in the literature, an additional measure of current depressive symptoms was added to the study for verification purposes.

Purpose in Life Test

The Purpose in Life test (PIL) is an attitude scale developed from Frankl's concept of Logotherapy (Crumbaugh & Maholick, 1981). The 22-item scale (see Appendix A) is intended to test Frankl's basic concept of Existential Vacuum, or the lack of meaning and purpose in an individual's life.

Crumbaugh and Maholick (1964) developed the PIL test in order to isolate Frankl's will-to-meaning construct from other personality constructs. Their initial research results, based on the study of 255 subjects, showed that the PIL test discriminated successfully between neurotic and nonpatient "normal" populations and that it was not a generalized measure of psychopathology. Crumbaugh (1968) cross-validated the earlier results with a larger sample of 1,151 subjects. Once again the PIL discriminated between normals and psychiatric patients at the .001 level. At the same time, PIL scores were shown to be unrelated to most of the clinical scales of the Minnesota Multiphasic Personality Inventory (MMPI). An exception was the D (Depression) scale of the MMPI, where a negative correlation of -.30 was reported in 1964 and -.65 in 1968. All of the other comparison studies demonstrating correlations with PIL scores involved personality traits such as the Sens of Well Being scale of the California Personality Scale or the Meaningless factor of the Elmore Anomie Scale. When the PIL was compared to a series of questions utilized by Frankl (1960) to determine the relative absence of existential vacuum, it correlated positively, $r(134)=.68$.

In summary, the PIL demonstrated predicted differences between normal and psychiatric populations, showed a low relationship with more traditional diagnostic measures, and reported a high relationship to Frankl's own

nontraditional approach to measuring the presence of existential vacuum (Stropko, 1975). Crumbaugh and Maholick (1981) further supported the construct, concurrent and criterion validity of the PIL based upon their own results. Over the last several years nearly 100 researchers (e.g., Crumbaugh & Maholick, 1981; Federman, 1983; and Stropko, 1975) have used the PIL and found it to be a useful measure of Frankl's will-to-meaning. Stropko's excellent review of the research conducted using the PIL strongly supported its measurement capabilities.

Measurement of Stress

The amount of suffering a POW endured may be equated with the amount of stress experienced while in captivity. Selye (1983) made the point that all demands upon adaptability evoke the stress phenomenon. Stress has long been recognized as being directly related to tension, death, and disease (Baker, 1980; Kral, Pazder & Wigdor, 1967; Perkins, 1983). The assumption that stress is also related to pain, suffering, trauma,and degradation seems well-founded, and highly related to POW experiences.

In recent decades, the stress of major life events has been investigated thoroughly. Holmes and Rabe (1967) have proposed that the readjustment required by major life events or changes substantially increases the risk of physical and psychological illness. Their Social

Readjustment Rating Scale has been used frequently in subsequent behavioral medicine research projects. It has, however, received extensive criticism by Kaplan (1979) and by Rabkin and Struening (1976) in regard to the scale's construction and its very low (.12) correlation with health outcomes (cf. Kanner, Coyne, Schaefer & Lazarus, 1981). Breznitz and Goldberger (1983) have also recently criticized the utility of the scale for its unidimensionality, differential weighting scheme, and failure to take into consideration the possible effects of desirable events.

In contrast to the major life events approach, Richard Lazarus and his associates have emphasized the adaptational significance of the stresses and pleasures that characterize everyday life (Coyne, Kanner & Hulley, 1979; Lazarus, 1980; Lazarus & Cohen, 1977; Lazarus, Kanner & Folkman, 1980; Kanner, Coyne, Dakof, Folkman & Lazarus, 1982). Even earlier, McLean (1976) suggested:

> Perhaps because the unit of stress is relatively small and the stressors so familiar, these kinds of stressors have been taken for granted and considered to be less important than more dramatic stressors. Clinical and research data indicate that these microstressors acting cumulatively, and in the relative absence of compensatory positive experience can be potent sources of stress (p. 298).

In their research on daily stressors (or hassles, as they were called), Kanner and his associates (1981) studied the responses of 100 subjects on a 118-item stress checklist.

They reported a strong relationship between the frequency of daily hassles (stress) and subsequent psychological problems. They also found that hassles were a more powerful predictor of psychological symptoms than life events in each of the six comparisons they made. In addition, there was no reliable relationship between the two measures of presumed precursors of stress.

The results suggest that hassles contribute to symptoms independent of major life events, and that although daily hassles or stress may overlap considerably with life events, they also operate quite strongly and independently of major life events in predicting future psychological symptoms (Kanner et al., 1981). Daily uplifts or positive experiences in relation to daily hassles were also important in predicting symptoms, but only for the female participants in the study.

The work of Kanner et al. (1981) is significant because they were able to demonstrate that daily stressors summate to account for future physical and psychological problems. The 118-item checklist of daily hassles, although relevant to their study, has limited relevance to the present need to assess the past daily stress of POWs while in captivity.

To develop a daily hassles scale capable of assessing the POW's stress experience, one must go to the literature. There is an extensive body of POW and concentration camp

survivor literature in which survivors reported events or circumstances that were stressful to them during their captivity. The researcher who has assessed survivor stress the most successfully is Boder (1954). His work with former concentration camp inmates was one of the earliest studies done on survivors of a catastrophe. By taking a complete history of each individual's traumatic experiences, Boder was able to develop an extensive questionnaire detailing a survivor's suffering. Boder divided his inventory into eight separate areas: (a) socioeconomic and geographical, (b) cultural-affective, (c) medical, (d) labor, (e) direct bodily violence, (f) appearance, cleanliness and dress, (g) transportation and (h) food, for a total of 46 different stressors.

By using a combination of Boder's items and those provided by Kanner and his associates (1981), Foy (1984), Flynn (1983), Sommers (1980, 1980b, 1980c), and the Veterans Administration Report (1980), it was possible to develop a 78-item daily stress questionnaire. This device, based upon the item validities established by previous research, is appropriate for use with POWs and other veterans (see Appendix B). It is possible to measure a former veteran's Purpose in Life and to assess the amount of daily stress endured while in the military service or as a POW. If purpose in life can be achieved through suffering, then there should be a positive correlation

between PIL scores and the amount of suffering reported by former POWs. Internment, even under inhumane conditions, may not be completely detrimental to psychological and social functioning later in life.

Limitations and Challenges

The methodology of the present study introduces several possible sources of distortion of the data which should be noted. First, this study relies on post hoc, self-report data of individuals who are now between 60 and 70 years old. The possibility exists that the data may include distortion caused by a failure of these individuals to recall events that occurred 40-45 years earlier. However, as Deaton et al (1977), Brett and Ostroff (1985), Rowen (1973), and Niederland (1982) have pointed out, former POWs appear to be affected by hypermnesia consisting of "overly sharp, distinct, and virtually indelible memories" of what happened to them and that many former POWs continue to be haunted by these painful, unforgettable memories. It is also true that these men had been instructed, if captured, to remember as many of their experiences as possible in order to provide the military with revevant information upon repatriation (Deaton et al., 1977). For many POWs following this instruction became a part of their duty and they risked even death by keeping diaries of events, rations, deaths, movements, and facilities

(Nardini, 1952; Duncan, 1982; Dean, Willis & Obourn, 1980). Many of these diaries were later used in war crimes trials. Rowen (1973) has also discussed several cases of POWs who were able to demonstrate fantastic recall of specific dates, names, experiences, and a variety of memory games.

Second, in commenting on the present sample, it is important to note that the POWs used in this research may not be representative of the POW population as a whole. Experiences not only varied from camp to camp, but were also related to length of captivity and physical condition at the time of capture. As Nardini (1952) pointed out, there were also differences in age, motivation, and cleverness. All POWs endured the traumatic experiences of capture and internment, however, and individual differences such as socioeconomic status (SES), rank and education can be statistically evaluated.

Finally, it is important to recognize the limitations of this instrument. Although Kanner et al. (1981) and Delongis et al. (1982) used a similar version of the instrument with success in their studies on daily stress, the stressors encountered during combat or internment are unusual. Many of their items needed to be changed in order to properly assess a veteran's daily stress. The theory of the relationship between daily stress and future well-being remains unchanged, except for the additional factor of Purpose in Life and its presumed impact on

future functioning and attitude.

Purpose of Study

There are several important aspects of this study. The first is the review and discussion of research concerning former POWs and the long-term effects of their incarceration. The most frequently cited authors have clearly expressed their belief that pain, suffering, and daily stress are harmful to an individual and that the effects of this stress are nearly always detrimental (Beebe, 1975; Chodoff, 1963; Gill & Bell, 1981; Hall & Malone, 1976; Russell, 1984). Several recent authors (Anderson, 1975; Deaton, Berg & Richlin, 1977; Hunter, 1983; Johnson, 1983; Kentsmith, 1982; Ursano, 1981; Ursano & Wheatley, 1982) have challenged the belief that only negative effects occur. Their research results suggest that an individual who has been subjected to intense and prolonged periods of pain and stress often benefits from the experience in a way that is positive and life changing. One benefit is the achievement of a more positive attitude toward living and an understanding of the purpose of one's life.

The hypotheses of this study are based upon the claims that the daily stress, pain, and suffering endured by former POWs, although physically and psychologically demanding, were beneficial in that the individuals found

a purpose or meaning in life, which has been shown to be associated with happiness and satisfaction.

Second, there is a limited amount of data testing for positive consequences of captivity (Ursano, 1981). The military community and its survival training specialists would be extremely interested in any research concerned with the POW's survivability (Deaton et al., 1977). If finding a purpose in life and a meaning in one's suffering leads to a greater chance of survival, it might be possible to include this factor in survival training programs.

Nardini (1952) outlined what he felt were the most important factors contributing to a POW's survival. He included such factors as: (a) subconscious and/or conscious motivational factors, e.g., "instinct" of self-preservation, will to live, or self-esteem; (b) lack of experience with depression and physical illness; (c) cleverness and general cunning; (d) sense of humor; (e) fantasy; (f) good discrimination and judgment; (g) ability to work with and contribute to prisoner groups; and (h) general individual physical and emotional differences, i.e., health at time of capture, physical attributes, or ability to disassociate oneself from emotionally draining events. Survival training could be modified to include classes teaching how the previously mentioned characteristics could help trainees overcome the extreme stress of

prolonged captivity, or at least handle it more effectively.

Kentsmith (1982), Deaton et al. (1977) and Popkin, Stillner, Hall and Pierce (1978) all agree that identifying those people who can operate best under stress can be useful both in selecting individuals for combat missions and in outlining the psychological steps one might take in order to increase the odds of survival if captured. By understanding (prior to possible capture) the psychological reactions to being a POW, and learning how to cope with solitary confinement or other stressors, a combat soldier is more thoroughly prepared for survival. In addition, Segal (1973) has pointed out that a POW's transition back into the mainstream of society or military life is much easier if he or she more fully understands the effects of incarceration and how it has most likely altered one's self image as well as one's view of others.

Finally, the results of this study may prove to be useful in the therapeutic treatment of former POWs and their families (Hunter, 1983). Recent experiences of the VA Social Work and Psychiatric staff with former POWs (Squire, 1985) have demonstrated the need of many POWs to more fully understand why they survived when so many others did not and what purpose (if any) their immense suffering served. Resolving these questions through therapy designed to relieve existential vacuum could

be of benefit to former POWs.

Hypotheses

There are at present two opposing views regarding the long-term effects of captivity associated with pain, stress, and suffering. One view suggests that pain, suffering, and/or daily stress are detrimental to an individual's physical as well as psychological well-being (Baker, 1980; Beebe, 1975; Netzger, 1970; Russell, 1984). The results of these studies show that many former POWs are currently experiencing physical and psychological problems related to their internment. In opposition to this view is the belief that pain, suffering, and/or daily stress are made more bearable by finding a purpose in life and a meaning in one's suffering. The acceptance of this purpose in life presumably leads to a sense of well-being (Frankl, 1962; Ursano, 1981; Wheatley & Ursano, 1981).

The question of whether or not these two views are contradictory or incomplete is difficult to determine. Perhaps both views are correct, but need to be examined more closely in order to determine how they are related. Former POWs did suffer to a great degree. Yet, while many died, others survived and went on to live happy and successful lives. Some continued suffering after their release and were never able to answer the question: "Why did I survive?"

In order to seek an answer to the question of whether or not former POWs benefited from their prolonged pain and suffering by gaining a more definite purpose or meaning in their lives, the following research questions were developed:

1. Do former prisoners of war show the presence of a purpose and meaning in life to a greater extent than a comparable group of non-POW combat veterans?

2. Do former POWs show the presence of a definite meaning in life to a greater extent than a comparable group of non-POW, non-combat veterans?

3. Do former POWs who endured extreme amounts of stress show the evidence of a higher purpose and meaning in life than former POWs who experienced a lesser amount of daily stress?

In order to test these hypotheses concerning the long-term effects of daily stress, the following methods are necessary. First, since POWs were initially combat soldiers who were captured through error, miscalculation, misfortune or overwhelming odds, it seemed apparent that they should be compared with former fighting comrades, i.e., combat veterans. Since combat veterans' experiences were quite different from non-combat veterans' experiences, it seemed useful to make comparisons among all three groups of veterans. Finally, due to the ever-changing combat situation and captor attitudes as the war

went on, it is also necessary to compare former POWs with each other. As Nardini (1952) clearly pointed out, individual differences were an important factor accounting for what he considered to be the saving of many lives.

In addition, since there are two apparently conflicting beliefs regarding the effects of long-term stress and incarceration, it is necessary to assess both the negative and positive consequences of captivity, i.e., depression and purpose in life.

CHAPTER II

METHODOLOGY

Subjects

The participants in the study came from three populations; (a) former European Theater WW II POWs, (b) European Theater WW II combat veterans, and (c) European Theater and stateside WW II non-combat veterans. Former prisoners of war were recruited from six American Ex-POW chapters in Texas, one chapter in Massachusetts, one in Minnesota and one in Kansas. These chapters were sent letters requesting their assistance in completing the study. Some additional POW subjects were obtained from a national Ex-POW monthly membership list and several POWs who asked to be included in the study after hearing about it from other former POWs. All of the available and relevant demographic information on this population is presented in Table 2. Former POW subjects were limited to European Theater POWs, who had spent a minimum of 30 days in captivity. The majority of them were Army veterans whose age at the time of completing the surveys ranged from 59 to 76 years. Pacific Theater POWs were excluded from this study due to the extremely different

TABLE 2

MEANS AND STANDARD DEVIATIONS OF VARIABLES
FOR POW, COMBAT & NON-COMBAT GROUPS

Variables	POWs (n=55)		Combat (n=35)		Non-combat (n=35)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Current Age	64.85	3.59	66.97	4.36	66.41	4.51
Enlisted Age	21.23	3.44	22.19	3.40	23.52	5.20
Captured Age	23.03	3.54	-----	-----	-----	-----
Repatriated Age	23.94	3.63	-----	-----	-----	-----
Discharge Age	27.27	9.18	25.85	6.65	26.55	5.32
Months Served	41.38	45.15	48.71	41.47	35.26	15.13
Days Combat	65.98	72.51	270.41	262.96	-----	-----
Days in Combat Zone	108.52	130.98	370.23	268.36	455.29	285.44
Months Prisoner	10.30	6.37	-----	-----	-----	-----
Years Education	13.34	2.75	13.41	2.32	13.23	1.93
Longest Continuous Employment (years) Post Service	24.09	10.56	23.15	8.24	26.44	10.01
Number of Jobs Post Service	3.92	3.41	4.17	2.51	3.44	3.32

captivity experiences they endured (see Table 1). The response rate for this population was 92% for those former POWs who were sent surveys (57 out of 62 responded with two unusable surveys due to lack of complete data).

The comparison group of WW II combat veterans was primarily recruited from American Legion, Veterans of Foreign Wars, Disabled American Veterans, and Masonic organizations in and around Topeka, Kansas. Approximately 10% of the combat group subjects were recruited outside of the state of Kansas. The majority of this group were Army veterans whose age at the time of completing the surveys ranged from 60 to 77 years. The response rate for this group was around 47% (35 out of 75 responded with seven unusable surveys due to lack of complete data or wrong Theater of Operations, i.e., Pacific). Demographic information on this group is provided in Table 2.

The comparison group of WW II non-combat veterans was largely recruited from the same sources as was the combat group. Since this sample was more difficult to obtain than the other two groups, approximately 30% of the subjects were recruited outside of the state of Kansas, primarily in Texas and Minnesota. This group was limited to European Theater or United States stationed non-combat veterans who served for a minimum of 30 days during WW II. The majority of this non-combat group were Army veterans.

Their ages at the time of completing the surveys ranged from 58 to 77 years. The response rate for this group was 78% (35 out of 45 responding). Demographic information about this group is provided in Table 2.

Thus, three groups were formed: (a) POWs, (b) Combat veterans, and (c) Non-combat veterans. All subjects were male veterans. Fewer than 5% were minorities. Several more veterans who responded after the cutoff date for data collection were not included in the analyses.

Procedure

All of the subjects were solicited for the study by requests for volunteers to participate in a research project approved by Texas Tech University's Human Subject Review Committee (see Appendix C). In order to be included in the study, each subject had to answer all the appropriate questions on the Purpose in Life test (PIL), Beck Depression Inventory (BDI) and Daily Stressors questionnaire. The subjects in all three groups were requested to answer the appropriate questions regarding time in service, rank, education, date of capture and repatriation (for POWs only), and other relevant study questions in either Appendix D for the POW subjects or Appendix E for the combat and non-combat subjects. The subjects in all three groups were assured of the confidentiality of their responses and instructed to answer all the items in the

correct order and as honestly and factually as possible. Questionnaires, participant forms, surveys and instructions were either mailed to or handed to all subjects who agreed to participate in the study.

The study instruments were placed in one of the following two orders: (a) informed consent, demographic questionnaire, Daily Stressors questionnaire, Purpose in Life test and Beck Depression Inventory, or (b) informed consent, demographic questionnaire, Beck Depression Inventory, Purpose in Life test and Daily Stressors questionnaire. This ordering was done to determine if an ordering effect was present in the study. The experimental design of each hypothesis may be seen in Table 3.

Instruments

Purpose in Life Test (PIL)

The Purpose in Life test (PIL) is composed of 20 Likert scale scored items (see Appendix A). It is a self-administered measure of purpose and meaning in life. The test is scored in the positive direction; higher scores reflect more definite meaning and purpose in life than do lower scores. The maximum and minimum scores are 140 and 20, respectively. Mean score and standard deviation for normals is 102 and 19 (Crumbaugh & Maholick, 1981). Crumbaugh and Maholick (1981) reported that the construct and concurrent validity of the scale are well

TABLE 3

EXPERIMENTAL DESIGN FOR THE TESTING OF EACH HYPOTHESIS

Purpose in Life Scores

Hypothesis One:

Groups	High	Low *
POW	yes	no
Combat	no	yes

Hypothesis Two:

Groups	High	Low *
POW	yes	no
Non-Combat	no	yes

Hypothesis Three:

Groups	High	Low *
High Stress POW	yes	no
Low Stress POW	no	yes

*Yes indicates that more scores should fall within this cell than within the No cell, for that group.

supported based upon their own research (Crumbaugh, 1968; Crumbaugh & Maholick, 1964).

Daily Stressors Questionnaire

The Daily Stressors questionnaire is a 78-item scale with weights applied to each scale item according to the judged severity (intensity) of the stressor. It is a self-administered measure of the subject's accumulated daily stress (suffering). It is a compilation of earlier well-constructed and valid surveys and questionnaires used by Boder (1953), Flynn (1983), Foy (1984), Kanner, Coyne, Schaefer & Lazarus (1981), Sommers (1980, 1980b, 1980c), and the Veterans Administration (1980). Two summary scores for each questionnaire were generated for analysis: (a) frequency, a basic count of the number of items checked, and (b) intensity, the sum of the three point severity ratings (somewhat, moderate and severe) multiplied by the frequency count.

Beck Depression Inventory (BDI)

The Beck Depression Inventory (BDI) (Beck, 1967, 1968) (see Appendix F) is a 21-item questionnaire designed to give a rapid assessment of the severity of depression. It also may provide information regarding an individual's negative thinking (Beck, 1968). The inventory is scored in the positive direction; higher scores reflect more

severe depression. The maximum and minimum scores are 66 and 0, respectively. Interpretations of scores are: 0-9 normal, 10-15 mild depression, 16-19 mild to moderate depression, 20-29 moderate to severe depression, and 30-66 severe depression (Beck, 1978; Young, 1982). Numerous investigators (Beck, 1967, 1968, 1978; Beck & Steer, 1984; Reynolds & Gould, 1981) over the past 20 or more years have viewed the BDI as one of the better, most widely used self-report measures of general depression. Reynolds and Gould (1981) supported the utility of both the long and short versions of the BDI, suggesting that both forms demonstrate adequate internal consistency reliability. Beck and Steer (1984) also found that the BDI possessed high levels of internal consistency. The BDI is the instrument of choice to assess current levels of depression in the study's samples.

Demographics

Appendices D and E provide information regarding the subjects' time in service, age, rank, education, health, post-service adjustment, and other data relevant to the study. They were constructed using the Veterans Administration's POW Medical History questionnaire as a guideline.

Tests of the Hypotheses

The comparison of the mean Purpose in Life scores among the three groups (Hypothesis 1) was done using a simple analysis of variance (ANOVA). When a significant F-ratio was obtained, a multiple *t*-test was performed in order to determine which specific group(s) differed from the other(s). The comparison of the mean Purpose in Life score between former POWs and Non-combat veterans (Hypothesis 2) was performed in the same manner.

The relationship between POW stress levels and PIL scores (Hypothesis 3) was tested with a Pearson Product-Moment Coefficient of Correlation.

CHAPTER III

RESULTS

The results of the study are discussed in the following order: (a) preliminary normative data for the population under study, (b) scores for the three groups on the test variables, (c) tests of the hypotheses, and (d) post hoc analyses.

Preliminary Normative Data for All Groups

The means and standard deviations for all the major variables are presented in Table 3. The subject's age at the time of participation in the study, age upon entering the service, and age at discharge were all similar across groups. There were no statistically significant differences among the groups. The mean number of months served in the military by the Non-combat group members was less than that served by the POW and Combat group members. There was also less variability, as shown by lower standard deviations, in the length of service in the Non-combat group than in the POW or Combat groups. This result is partially accounted for by the fact that only one individual in the Non-combat group served as many as

82 months, whereas several POW and Combat group members served from 264 to 360 months (22 to 30 years); i.e., they stayed in the service until retirement. POWs spent fewer days participating in combat and in combat zones prior to capture than members of the Combat group.

An unexpected but interesting result was the finding that Non-combat group members spent the longest mean time in combat zones. This result is explicable by the facts that Non-combat veterans were less likely to be transferred, less likely to be wounded, and less likely to be captured than were Combat and POW group members. The average length of time spent in captivity was 10.30 months for the POW group, which corresponds very closely to the previously reported (Veterans Administration, 1980) mean of 11.50 months of incarceration for European Theater POWs.

The POW, Non-combat and Combat groups all reported similar levels of educational achievement. The means for all groups were within the range of 13.23 to 13.41 years. The group ranges were also similar in mean number of years employed continuously (23.15 to 26.44) and mean number of jobs held since military discharge (3.41 to 3.92).

Fate of the Hypotheses

Hypothesis 1 predicted that former POWs would have higher scores on the Purpose in Life (PIL) test than a comparable group of non-POW combat veterans. A strong

and reliable effect occurred in the opposite direction. POWs scored significantly lower on the PIL than did non-POW combat veterans (99.76 vs. 114.28; see Table 4), $t(88)=-3.58, p<.001$ (see Table 5). Thus, Hypothesis 1 was strongly disconfirmed. Additional statistical details on the ANOVA may be found in Appendix G.

Hypothesis 2 stated that former POWs would exhibit a reliably higher mean on the PIL test than would a comparable group of non-POW, Non-combat veterans. Once again, a strong reliable effect was found in the opposite direction, with POWs scoring significantly lower than the non-POW, Non-combat group on the PIL (99.76 vs. 114.02), $t(88)=-3.95, p<.001$ (see Table 5). Thus, Hypothesis 2 was also strongly disconfirmed. Analytical and descriptive statistics for this ANOVA may also be found in Appendix G.

Hypothesis 3 predicted a positive correlation between stress intensity and PIL scores in the POW group. The result was $r(53)=-.34, p<.01$ (cf. Table 29). Hypothesis 3 was also strongly disconfirmed.

The ANOVA results for the tests of the first two hypotheses uncovered some additional significant differences among the three groups. The POW group's reported mean Frequency of Stress was significantly higher (48.03 vs. 25.08) than the mean of the Combat group, $t(88)=5.23$, $p<.001$, and of that of the Non-combat group (48.03 vs. 12.67), $t(88)=9.62, p<.001$ (see Table 6). The POW group's

TABLE 4

MEANS AND STANDARD DEVIATIONS OF DEPENDENT VARIABLES FOR ALL GROUPS

Variables	POWs (n=55)		Combat (n=35)		Non-combat (n=35)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Frequency of Stress	48.03	18.70	25.08	3.81	12.67	13.77
Intensity of Stress	101.16	46.94	43.31	42.05	19.79	24.86
Beck Depression Inventory	13.50	8.55	7.57	5.46	5.76	3.24
Purpose in Life	99.76	20.52	114.28	15.59	114.02	8.85

TABLE 5

t-TESTS ON INDEPENDENT MEANS OF DEPENDENT VARIABLES BETWEEN GROUPS

Purpose in Life

Comparison	*t*	*df*	*p*, two-tailed
POW			
Combat	-3.58	88	.001
POW			
Non-Combat	-3.95	88	.001
Non-Combat			
Combat	0.00	68	1.000

TABLE 6

t-TESTS ON INDEPENDENT MEANS OF DEPENDENT VARIABLES BETWEEN GROUPS

Frequency of Stress

Comparison	*t*	*df*	*p*, two-tailed
POW			
Combat	5.23	88	.001
POW			
Non-Combat	9.62	88	.001
Non-Combat			
Combat	-2.74	68	.016

mean Intensity of Stress was also higher than the mean of the Combat group (101.16 vs. 43.31), $t(88)=5.93, p<.001$, and that of the Non-combat group (101.16 vs. 19.79), $t(88)=9.45, p<.001$. The Non-combat group mean Intensity of Stress was also significantly lower (43.31 vs. 19.79) than the mean of the Combat group, $t(68)=-2,86, p<.01$ (see Table 7). On the Beck Depression Inventory, the POW mean was significantly higher (13.50 vs. 7.57) than the mean of the Combat group, $t(88)=3.66, p<.001$, and that of the Non-combat group (13.50 vs. 5.76), $t(88)=5.17, p<.001$ (see Table 8).

Post Hoc Analyses

There was a 4:1 ratio of enlisted to officer subjects across groups. It was decided to explore officer and enlisted differences within groups on the four main dependent variables (PIL, BDI, Frequency of Stress and Intensity of Stress). Results for the POW group showed that officers scored significantly lower than enlisted members in their report of Frequency of Stress (38.92 vs. 51.14; see Table 9), $F(1,53)=-4.76, p<.05$ (see Table 10). Officers also scored lower in their reports of Intensity of Stress (76.71 vs. 109.51), $F(1,53)=5.52, p<.05$ (see Table 11). No significant officer/enlisted differences were found in this group on PIL or BDI variables. Descriptive data are documented in Tables 12 and 13.

TABLE 7

t-TESTS ON INDEPENDENT MEANS OF DEPENDENT VARIABLES BETWEEN GROUPS

Intensity of Stress

Comparison	*t*	*df*	*p*, two-tailed
POW			
Combat	5.93	88	.001
POW			
Non-Combat	9.45	88	.001
Non-Combat			
Combat	-2.86	68	.01

TABLE 8

t-TESTS ON INDEPENDENT MEANS OF DEPENDENT VARIABLES BETWEEN GROUPS

Beck Depression Inventory

Comparison	*t*	*df*	*p*, two-tailed
POW			
Combat	3.66	88	.001
POW			
Non-Combat	5.17	88	.001
Non-Combat			
Combat	-1.76	68	.16

TABLE 9

ANALYSIS OF VARIANCE OF OFFICER AND ENLISTED DIFFERENCES (POW)

Variables	Officer (n=14)		Enlisted (n=41)	
	Mean	S.D.	Mean	S.D.
Purpose in Life	107.42	14.83	97.14	21.67
Beck Depression Inventory	11.78	13.50	14.09	9.01
Frequency of Stress	38.92	23.12	51.14	16.11*
Intensity of Stress	76.71	48.68	109.51	43.87*

*$p < .05$

TABLE 10

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON OFFICER AND ENLISTED DIFFERENCES (POW) FOR THE FREQUENCY OF STRESS VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Rank	1557.88	1	1557.88	4.76	0.03
Error	17334.05	53	327.06	--	--
Total	18991.93	54	--	--	--

TABLE 11

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE OF OFFICER AND ENLISTED DIFFERENCES (POW) FOR THE INTENSITY OF STRESS VARIABLE

Source	SS	df	MS	F	p
Rank	11226.43	1	11226.43	5.52	0.02
Error	107805.10	53	2034.06	--	--
Total	119031.53	54	--	--	--

TABLE 12

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON OFFICER AND ENLISTED DIFFERENCES (POW) FOR THE PURPOSE OF LIFE VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Rank	1103.38	1	1103.38	2.70	0.11
Error	21650.55	53	408.50	--	--
Total	22753.93	54	--	--	--

TABLE 13

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON OFFICER AND ENLISTED DIFFERENCES (POW) FOR THE BECK DEPRESSION INVENTORY VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Rank	55.78	1	55.78	0.76	0.39
Error	3895.97	53	73.51	--	--
Total	3951.75	54	--	--	--

In the Combat group, no significant differences were found between officers' and enlisted men's responses on the PIL, BDI, and Frequency or Intensity of Stress variables. These non-significant differences are documented in Tables 14 through 18.

In the Non-combat group, officers scored significantly higher than enlisted men on the PIL (120.83 vs. 112.93; see Table 19), $F(1,33)=4.35, p<.05$ (see Table 20). No significant differences were found on the other variables and the data are documented in Tables 21, 22, and 23.

When the POW, Combat and Non-combat groups were combined in order to compare the means of officer and enlisted group members on the PIL, BDI, and Frequency and Intensity of Stress variables (see Table 24), no significant differences were found. These data are documented in Tables 25 through 28. Although no significant differences were found in the combined group between officer and enlisted means for any of the four major dependent variables, there is a fairly definite trend for officers to have reported experiencing lesser amounts of stress than enlisted members.

Pearson product-moment correlations among variables may be found in Table 29. For each group, except the non-combat group, there is a reliable negative correlation between the PIL test score and the BDI score. That is, as BDI scores increase (increased depression), PIL scores decrease. In the POW group, Intensity of Stress is

TABLE 14

ANALYSIS OF VARIANCE OF OFFICER AND ENLISTED DIFFERENCES (COMBAT)

Variables	Officer (n=5)		Enlisted (n=30)	
	Mean	S.D.	Mean	S.D.
Purpose in Life	110.60	21.29	114.90	14.83
Beck Depression Inventory	9.00	7.34	7.33	5.20
Frequency of Stress	11.80	9.03	27.30	23.48
Intensity of Stress	20.60	22.71	47.10	43.57

TABLE 15

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON OFFICER AND ENLISTED DIFFERENCES (COMBAT) FOR THE PURPOSE IN LIFE VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Rank	79.24	1	79.24	0.32	0.58
Error	8191.90	33	248.24	--	--
Total	8271.14	34	--	--	--

TABLE 16

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON OFFICER AND ENLISTED DIFFERENCES (COMBAT) FOR THE BECK DEPRESSION INVENTORY VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Rank	11.90	1	11.90	0.39	0.54
Error	1002.67	33	30.38	--	--
Total	1014.57	34	--	--	--

TABLE 17

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON OFFICER AND ENLISTED DIFFERENCES (COMBAT) FOR THE FREQUENCY OF STRESS VARIABLE

Source	SS	df	MS	F	p
Rank	1029.64	1	1029.64	2.08	0.16
Error	16323.10	33	494.64	--	--
Total	17352.74	34	--	--	--

TABLE 18

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON OFFICER AND ENLISTED DIFFERENCES (COMBAT) FOR THE INTENSITY OF STRESS VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Rank	3009.64	1	3009.64	1.74	0.20
Error	57135.90	33	1731.39	--	--
Total	60165.54	34	--	--	--

TABLE 19

ANALYSIS OF VARIANCE OF OFFICER AND ENLISTED DIFFERENCE (NON-COMBAT)

Variables	Officer (n=6)		Enlisted (n=29)	
	Mean	S.D.	Mean	S.D.
Purpose in Life	120.83	4.26	112.93	8.98*
Beck Depression Inventory	4.83	2.78	5.82	3.37
Frequency of Stress	11.50	12.17	13.03	14.07
Intensity of Stress	21.00	28.40	19.55	24.17

*$p < .05$

TABLE 20

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON OFFICER AND ENLISTED DIFFERENCES (NON-COMBAT) FOR THE PURPOSE OF LIFE VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Rank	310.45	1	310.45	4.35	0.04
Error	2352.69	33	71.29	--	--
Total	2663.14	34	--	--	--

TABLE 21

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON OFFICER AND ENLISTED DIFFERENCES (NON-COMBAT) FOR THE BECK DEPRESSION INVENTORY

Source	SS	*df*	*MS*	*F*	*p*
Rank	4.91	1	4.91	0.45	0.50
Error	356.97	33	10.82	--	--
Total	361.88	34	--	--	--

TABLE 22

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON OFFICER AND ENLISTED DIFFERENCES (NON-COMBAT) FOR THE FREQUENCY OF STRESS

Source	SS	df	MS	F	p
Rank	13.34	1	13.34	0.07	0.79
Error	6286.94	33	190.51	--	--
Total	6300.28	34	--	--	--

TABLE 23

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON OFFICER AND ENLISTED DIFFERENCES (NON-COMBAT) FOR THE INTENSITY OF STRESS

Source	SS	df	MS	F	p
Rank	10.43	1	10.43	0.02	0.90
Error	20393.17	33	617.97	--	--
Total	20403.60	34	--	--	--

TABLE 24

ANALYSIS OF COMBINED GROUP OFFICER AND ENLISTED DIFFERENCES

Variables	Officer (n=25)		Enlisted (n=100)	
	Mean	S.D.	Mean	S.D.
Frequency of Stress	26.92	22.92	32.57	23.96
Intensity of Stress	52.12	48.36	64.43	55.18
Purpose in Life	111.28	15.16	107.03	18.70
Beck Depression Inventory	9.56	6.77	9.69	7.64

TABLE 25

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON DIFFERENCES BETWEEN COMBINED OFFICER AND ENLISTED GROUPS FOR THE FREQUENCY OF STRESS VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Rank	638.46	1	638.46	1.13	0.29
Error	68910.02	122	564.84	--	--
Total	69548.48	123	--	--	--

TABLE 26

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON DIFFERENCES BETWEEN COMBINED OFFICER AND ENLISTED GROUPS FOR THE INTENSITY OF STRESS VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Rank	3026.74	1	3026.74	1.04	0.31
Error	354620.96	122	2906.73	--	--
Total	357647.70	123	--	--	--

TABLE 27

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON DIFFERENCES BETWEEN COMBINED OFFICER AND ENLISTED GROUPS FOR THE PURPOSE IN LIFE VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Rank	360.47	1	360.47	1.10	0.29
Error	39821.95	122	326.41	--	--
Total	40182.42	123	--	--	--

TABLE 28

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON DIFFERENCES BETWEEN COMBINED OFFICER AND ENLISTED GROUPS FOR THE BECK DEPRESSION INVENTORY VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Rank	0.37	1	0.37	0.01	0.94
Error	6835.07	122	56.03	--	--
Total	6835.44	123	--	--	--

TABLE 29

CORRELATIONS AMONG STRESS INTENSITY, PIL AND BDI SCORES BY GROUP

	POW (n=55)		Combat (n=35)		Non-Combat (n=35)		Combined (n=125)	
	PIL	BDI	PIL	DBI	PIL	DBI	PIL	BDI
Stress	-.34**	.34**	-.21	.27	-.08	.43**	-.41**	.48**
PIL	--	-.77**	--	-.72**	--	-.13	--	-.76**

**$p < .01$

negatively correlated with the PIL and positively correlated with the BDI. That is, as Intensity of Stress increases, PIL scores decrease and BDI scores increase. In the Non-combat group, Intensity of Stress was positively correlated only with the BDI (i.e., increased intensity of stress was associated with increasing signs of depression).

Some additional correlations among group variables may be found in Table 30. The most significant correlations included a positive relationship between days in combat and BDI scores for the POW group; i.e., the persons with more days in combat had more signs of depression. A negative correlation was found between the Frequency and Intensity of Stress and injuries received during captivity for POWs. That is, as stress levels increased (both Frequency and Intensity) injuries were less frequently reported. The Frequency and Intensity of Stress and rank were also negatively correlated for the POW group, suggesting that as rank increased, the experience of both Frequency and Intensity of Stress decreased.

For the Non-combat group, several positive correlations were found. The first to be discussed (see Table 30) was between stress (Frequency and Intensity) and age when military service began. That is, the older the Non-combat veterans were when they entered the service, the greater their reported levels of Frequency and Intensity of

TABLE 30

CORRELATIONS AMONG VARIABLES

Groups	Frequency of Stress	Intensity of Stress	Depression Inventory	Purpose in Life
POW (n=55)				
Days in Combat			.33**	
Injuries During Captivity	-.35**	-.41**		
Rank	-.29*	-.31**		
Combat (n=35)				
Discharge Age			.32*	
Combat Injuries			.32*	
Disabilities		.66**		
Non-Combat				
Current Age				.33*
Enlisted Age	.42**	.40**		
Discharge Age	.40**	.39**		
Days in Combat Zone	-.40*			
Injuries During Service				-.28*
Rank				.34*

*p < .05

**p < .01

Note: Due to the large number of statistical tests, these are, perhaps, best interpreted as chance results.

Stress were. Another positive correlation (see Table 30) was found between current age and PIL scores. That is, PIL scores increased with increasing age. A positive correlation for the Non-combat group was found between rank and current PIL scores; i.e., the higher the rank the higher the PIL score. In this same group (see Table 30), a negative correlation was found between days spent in a combat zone and Frequency of Stress scores. That is, as time spent in a combat zone increased, reports of the Frequency of Stress decreased. The number of injuries received while in the service was also negatively correlated with PIL scores for this group. The age at discharge was positively correlated with both Frequency and Intensity of Stress. That is, veterans who stayed in the service longer reported more stressful experiences during their military service.

In the Combat group, a positive correlation was found between current disabilities and Intensity of Stress scores; i.e., a combat veteran's report of current disabilities increased or was positively related to increased levels of stress while in the service. Combat injuries were also positively related to current BDI scores. That is, combat injuries suffered during the subject's military service were positively correlated to increased BDI scores, which indicate symptoms of depression. In the Combat group, age at discharge was also positively

correlated with current BDI scores. That is, higher BDI scores were found in veterans who were older at discharge. This relationship suggests that the veterans who stayed in until retirement had more symptoms of depression than veterans who were discharged after their military obligation was fulfilled.

The former POW group reported significantly higher incidences of stress-producing events than did the Combat or Non-combat groups. When looked at by group, there is a very noticeable difference between the type of stressor reported and the stressor's intensity level. The ten most frequently experienced stressors for the POW group are listed in descending order in Table 31. The most frequent stressors and their intensity levels for the Combat and Non-combat groups are listed in Tables 32 and 33. Finally, the placement of the dependent variable instruments had no effect on the results. Thus, no ordering effect was found.

In summary, higher PIL scores for the Non-combat and Combat groups than for former POWs suggested that the Non-combat and Combat group members showed the presence of a definite purpose or meaning in life as determined by normative tables for the PIL (Crumbaugh & Maholick, 1981). These same tables indicated that the POW group's mean scores on the PIL suggested indecisiveness, or neither the presence nor absence of a purpose in life.

TABLE 31

MOST FREQUENT POW GROUP (n=55) STRESSORS

Stressors	Frequency	Mean*
1. Insufficient food or starvation	55	2.76
2. Insufficient heating/cooling	54	2.44
3. Crowding of living/sleeping quarters	54	2.16
4. Overcrowding	53	2.22
5. Lack of soap, water or cleanliness	53	2.30
6. Extreme weather conditions	51	2.43
7. Inadequate substitution for shelter, food, etc.	51	2.54
8. Death of friends or no knowledge of their fate	49	2.61
9. Withholding or lack of clothing	49	2.22
10. Abrupt removal from friends, unit, etc.	48	2.02

*1-3 Scale Intensity of Stress

TABLE 32

MOST FREQUENT COMBAT GROUP (n=35) STRESSORS

Stressors	Frequency	Mean*
1. Concerns regarding combat, attacks or bombings	30	2.09
2. Extreme weather conditions	27	2.00
3. Death of friends or no knowledge of their fate	27	1.85
4. Break-up of unit, friendships, etc.	27	1.62
5. Abrupt removal from unit, friends, etc.	27	1.59
6. Prolonged state of terror, fear, etc.	25	1.95
7. Interference with sleep or rest	20	1.94
8. Inadequate substitution for shelter, food, etc.	20	1.89
9. Concern about accidents, illness or pain	16	1.93
10. Extended marches	16	1.81
11. Loneliness	16	1.75
12. Lack of soap, water or cleanliness	16	1.62

*1-3 Scale Intensity of Stress

TABLE 33

MOST FREQUENT NON-COMBAT GROUP (n=35) STRESSORS

Stressors	Frequency	Mean*
1. Abrupt removal from friends, unit etc.	22	2.02
2. Break-up of unit, friendships, etc.	18	2.14
3. Introduction of new culture, race, etc.	17	1.91
4. Death of friends or no knowledge of their fate	15	2.61
5. Inadequate substitution for food/ shelter	14	2.43
6. Crowding of living/sleeping quarters	14	2.16
7. Extreme weather conditions	13	2.54
8. Blackout of radio/newspaper information	12	1.93
9. Depersonalization (loss of personal identity)	11	1.96
10. Removal of privacy of bowel movements	11	1.91
11. Lengthy roll calls	11	1.88

*1-3 Scale Intensity of Stress

The Beck Depression Inventory (BDI) mean scores were within the normal range for the Combat and Non-combat groups, as determined by the normative tables for the BDI (Young, 1982). The results suggested that the mean POW group member showed signs suggestive of mild clinical depression.

Overall, POWs reported a significantly higher frequency of stress producing events, and also a higher intensity of stress experienced, than did the Combat or Non-combat groups. The Frequency and Intensity of Stress means for POWs were nearly double those of the Combat group and quadruple those of the Non-combat Group (Table 4). The results for all three groups combined suggest that as Frequency of Stress increases, PIL scores decrease and BDI scores increase (Table 29). This was most noticeable within the POW group.

CHAPTER IV

DISCUSSION

The first hypothesis of this study predicted that former prisoners of war would exhibit a reliably higher mean on the PIL than would a comparable group of non-POW combat veterans. The opposite result occurred. Combat veterans scored significantly higher on the Purpose in Life test than POWs. In fact, the only time that former POWs and combat veterans showed similar scores on the PIL was when POWs in low stress subgroups were compared with combat veterans in high stress subgroups (Appendix I). Since the POW frequency of stress scores were so much higher than the scores for combat veterans, it was only when high stress combat veterans and low stress POWs were compared that the levels of stress experiences were nearly equal. Thus, when compared with similar stress level groups, POWs were neither more nor less likely to have atypical PIL scores. The results clearly demonstrated that it was only as the frequency and intensity of stress increased past the average stress levels reported by combat veterans that significant differences began to appear between groups. Still, none of these explanations

account for the unexpected results of the first hypothesis.

The second hypothesis predicted that former POWs would exhibit a reliably higher mean on the PIL than would a comparable group of non-POW, non-combat veterans. Once again, the opposite result occurred. Non-combat veterans scored significantly higher on the PIL test than did POWs. This finding was even more unexpected due to the fact that the mean frequency and mean intensity of stress for non-combat veterans were not only significantly lower than the means for the POW group but were also significantly lower than the means for the Combat group. If Frankl's comcept, regarding the discovery of meaning or purpose in life through suffering, were correct, then surely one would not expect those group members in the lowest stress experience group (Non-combat) to exhibit higher scores on the PIL than the members in the highest stress experience group (POWs). Again, this result is very difficult to explain, other than by doubting the reliability of Frankl's theories regarding the discovery of purpose in life.

The third hypothesis predicted that former POWs who endured greater amounts of daily stress while in captivity would exhibit a reliably higher mean on the PIL than would former POWs who experienced lesser amounts of daily stress while in captivity. It is now clear that there is a negative relationship between Frequency of Stress and PIL scores,

especially in the POW group. This is the opposite of what was predicted.

Frankl stated that survival in a concentration camp sometimes resulted in the discovery of one's purpose or meaning in life, i.e., selected individuals may benefit from their experience. He proposed that this discovery of meaning was a result of the extreme suffering that one had endured and survived. The results of this study do not support his findings and, in fact, tend to contradict them. The POWs examined did not show that they had discovered a greater purpose or meaning in life. On the contrary, they reported that they had been negatively affected by their experiences and that they are still experiencing the detrimental effects of depression.

The issue of depression in former POWs is not a new one. As stated in the Introduction to this study, many researchers have found increased levels of depression in former POWs (Beebe, 1975; Dor-Shav, 1978; Nefzger, 1970; Nardini, 1952). The results of this study, contrary to what was predicted, also demonstrated high levels of depression in former POWs. The POW group mean on the Beck Depression Inventory (BDI) was significantly higher than the means for the Combat and Non-combat groups (13.5 vs. 7.6 and 5.8). This elevated mean also suggested th-t the average former POW suffers from the symptoms of mild clinical depression. For the POW and Non-combat groups, there was a positive significant

correlation between Intensity of Stress and BDI scores. Only the POW group displayed BDI levels high enough to indicate clinical depression.

Are the long-term effects of the prolonged stress and suffering associated with a POW's incarceration detrimental to that individual's future psychological and physical well being? The results presented in this study make a good case that there are often long-term negative effects of prolonged stress. In at least this sample of European Theater, POW veterans, the negative effects include higher levels of depression than found in comparable groups of veterans, and a less distinct acceptance of a purpose in life. Also, the results suggest that as stress levels and duration of stress increased, Purpose in Life scores decreased and symptoms of depression increased. The results of this study are thus similar to the results obtained by Beebe (1975), Cohen and Cooper (1955), Nardini (1952) and others, who also found increased levels of depression in POWs. In fact, the results from this study support the findings of these researchers and contradict the theories of Frankl regarding the relationship between suffering and purpose in life.

Several other points regarding the results of this study also need to be discussed. The first point is concerned with the differences that were found between officer and enlisted responses on the four major dependent

variables (PIL, BDI, Frequency and Intensity of Stress). As a casual observer of the military, one might be inclined to say that since officers and enlisted members serve together, there should be no differences in the reported frequency or intensity of stress. In actuality, the two experiences can be markedly different. In most POW camps, officers and enlisted members were almost completely separated, with officers receiving less strenuous duties and assignments. Most often, officers were treated better, with better food, more freedom of activity, and better intellectual stimulation (Baily, 1981), e.g., tours of airplane plants, libraries, and access to college courses.

Prior to their capture, officers had very different training, and were spared many stress-producing assignments, e.g., guard duty, retrieval of bodies, burials, etc. In most cases, officers also had more education and scored more highly on selection tests. They were also older, on the average, when they entered the service than were the enlisted men. The more mature age of the officers could have had an effect on their responses to the dependent variables.

In the case of the POW group, there were significant differences between officer and enlisted means on both the Frequency and Intensity of Stress reported (see Table 9). This should have been an expected result, due

to the differences in officer and enlisted captivity experiences.

There were similar mean differences on the dependent variables between officer and enlisted responses in the Combat group (see Table 14). Although not significant, a visual examination of the results in Table 14 clearly shows the differences between officer and enlisted responses, especially on the reports of Frequency and Intensity of stress.

In the Non-combat group, the differences between the officer and enlisted responses on the four dependent variables were far less distinct (see Table 19). The similarities in this group's experiences would be expected, however, based upon the nature of the non-combatants' role. Non-combatants had less stressful assignmenta and more time for recreation and relaxation.

In the combined (N=125) group analysis, no significant differences were found between the officers and enlisted men on any of the four dependent variables. When officer scores on the PIL and BDI were separated from the enlisted member scores, and compared with Frequency and Intensity of stress scores for officers,

the following correlations were obtained. The comparison between Intensity of Stress and PIL scores yielded a correlation of $r(23)=.09, p<.15$. The Intensity of Stress and BDI scores correlation was also non-significant, $r(23)=-.01, p<.47$.

Another important result of this study, not entirely related to the main hypotheses, was the unique response pattern of each group to individual stressors. It is important to recognize that while nearly all POWs marked the same daily stressors (insufficient food, insufficient heat, etc.) (see Table 31), only from one-third to two-thirds of the members of the other two groups checked identical stressors (see Tables 32 and 33). This demonstrates quite clearly that the POW group was highly homogeneous in its experience of daily stress, whereas the Combat and Non-combat groups were heterogenous in their experience of daily stress. Furthermore, the mean ratings of the intensity of each daily stressor by the POW group were much higher than were the highest mean intensity ratings of either the Combat and Non-combat groups (2.76 vs. 2.09 and 2.02).

The selection of daily stressors was also very different across the three groups. The POW group checked what were clearly more stressful and life threatening stressors than did the Combat and Non-combat group members, who generally checked annoying or anxiety-producing stressors.

Limitations of the Study

The limitations inherent in this type of study have been discussed earlier, but are reemphasized here. The sample employed in this study may not be representative of the total population of former WW II POWs and veterans. This limitation should be taken into consideration when evaluating both the preliminary normative data and the results. The sample represents a predominantly middle class, white, midwest to southwest living population. It is possible that the range of responses to WW II experiences may have been affected by these parameters. If this is so, one must be careful not to overgeneralize. This restriction does not mean that the results are not useful, but only that one must not generalize beyond the type of sample from which the data were collected.

In addition, the results from this study clearly rejected Frankl's theory regarding the discovery of purpose in life through suffering. Perhaps what is needed is a more extensive study designed to look at other POW and veteran populations. The Pacific Theater veterans suffered much higher rates of disease, combat losses and captivity mortality (Veterans Administration, 1980). The validity of the Purpose in Life test is also brought into question by the results of the study. Is this test truly a measure of purpose in life across all types of individuals, or does it only measure purpose in life in

select populations? One needs to ask, for example, whether or not the stress of 10.3 months of captivity was high enough to produce the increased PIL scores that were predicted. This is difficult to answer, because the experience of being a POW is highly stressful, even without the added concerns of forced marches, bombings, or death threats. It seems that 30 days in captivity would produce sufficiently high levels of stress to effect PIL scores and that 10.3 months would be more than sufficient time to effect one's discovery of a purpose in life.

Another limitation of the study might include the relatively small sample size of 55 former POWs. Response rates also varied between groups with a relatively low (47%) response rate for the Combat group. This might be an indication of a non-representative sample for this group.

Surely, someone needs to assess more thoroughly the officer and enlisted differences found in these samples. The small number of officers in this study may have led to inconclusive findings regarding the effects of frequency and intensity of stress on both PIL and BDI scores. Perhaps the officers in this study corresponded most closely to those Frankl claimed were affected positively by pain and suffering, those most likely to discover a purpose in life.

The addition of more POWs of various national origins and races to this study might have made the results more

generalizable. Other improvements might have included elimination of researcher bias through the use of double blind data collection and less personal contact with potential subjects. All this would need to be done fairly soon, since this population is limited in number and quickly diminishing in size and availability for study.

Finally, the assessment of feelings and experiences that occurred 40 years prior to the study is an area of great concern. How much of an effect was caused by general aging, repression of feelings, denial of experience, or simple loss of memory over the years is moot. Perhaps this question can never be fully answered and is an area of concern that cannot be eliminated in any study of past experiences. Certainly, it needs to be taken into consideration when explaining results or generalizing to other populations. Perhaps a more extensive survey of each subject's philosophical orientation towards war, and his experience of it, would have been helpful in analyzing the data. Surely, moral and social development, prior to and during active military duty had an effect on the subjects' experience of stress, suffering and pain. Even in this current study, many subjects responded to the questionnaires with additional comments regarding their reasons for fighting, surviving, or becoming successful after the war. These comments can be examined in Appendix J.

Theoretical and Practical Implications

Despite the several articles that report findings of clinically moderate to severe depression in former POWs (Baker, 1980; Beebe, 1975; Russell, 1984; Ward, 1984), this study found evidence of clinical signs of mild depression only in former POWs on the average. Although captivity was a stressful and anxiety producing experience, the long-term effects may not have been as severe as has been proposed. It must be emphasized that this was a small sample, using only European Theater POWs and that many of the POW subjects were more depressed than the average indicates. Articles by Duncan (1982), Nardini (1952), Sommers (1980), and Obourne (1985) clearly demonstrate the harsher conditions and more extreme death rate of Pacific Theater POWs of World War II.

The results of this study reflect a direct relationship between wartime stress and current psychological disturbances. Stress intensity was positively correlated with BDI scores and negatively correlated with PIL scores. Furthermore, the data supported the suggestion of Kanner et al. (1981) that the assessment of daily hassles may be a better approach to the prediction of concurrent and subsequent psychological symptoms than the usual life events approach.

The demonstration of mild levels of clinical depression in former POWs, on the average, suggests that many

of these people need immediate treatment for non-specific problems related to the extreme stress that they encountered during their military service and POW internment.

Implications for Future Research

Since the present samples were limited to European Theater POWs and Combat veterans, along with Non-combat veterans from both stateside and Europe, nothing can be concluded about Pacific Theater POWs and veterans, or about POWs and veterans of other wars. The differences between theaters of war, and across time periods, are so great that individual studies are of limited comparability. To make the results of their research more meaningful, future investigators should study large samples of veterans from different theaters and from different wars and countries.

Another possible improvement in future studies would be the inclusion of a more detailed assessment of the subjects' philosophical reasons for fighting a war and how the experience changed or modified their beliefs, feelings and attitudes, especially attitudes toward life and death.

Finally, a measure designed to assess the subjects' perception of locus of control (external vs. internal) would be helpful. This could be easily done and might help in understanding certain relationships between the

experience of stress and how its effects were dealt with.

The relevance of Frankl's theory to this type of population requires further study. If the present results are any indication of the "true" relationship between stress and purpose in life, then these results clearly negate Frankl's theory. On the other hand, the responses of officer subjects, although few in number, more closely resembled what was expected on the basis of Frankl's theory, i.e., high PIL scores and low BDI scores. Perhaps someone should study a sample of subjects who correspond more closely to Frankl's background. Such a sample would consist of highly educated people with high moral values. A question that needs to be considered more closely is that of moral development and its possible effects on the experience of stress. Recent post-traumatic stress disorder (PTSD) articles seem to indicate that Kolberg's moral development, and Erickson's social, stages are related to the effects of stress on people and their handling of that stress (Figley, 1978).

Finally, although the question of pre-morbid psychological functioning is important, it was not feasible to assess this variable in the study, so its effects on the dependent measures are not known. In addition, the inclusion of a widely used assessment instrument such as the MMPI might provide enough evidence to more fully support the alternative model proposed by Beebe (1975), Nardini (1952) and Russell (1984).

CHAPTER V

CONCLUSIONS

The present study investigated the relationship between the experience of suffering and pain (stress) and the achievement of a definite purpose or meaning in life. Specifically the stressful experiences of former World War II POWs were correlated with a current assessment of psychological well-being using the Purpose in Life test and the Beck Depression Inventory. Three groups of veterans were studied: (a) former POWs of World War II who were held captive in the European Theater, (b) Combat veterans of the European Theater of Operations, and (c) Non-combat veterans who served in Europe or stateside during World War II. A stress questionnaire was developed in order to measure the frequency and intensity of wartime stress experiences. The Purpose in Life test was used to assess purpose in life and the Beck Depression Inventory was used to assess current symptoms of clinical depression. The results of the study led to the following conclusions:

1. Purpose in Life scores decreased rather than increased with increasingly higher levels of stress (Table 29).

2. Stress levels and the experience of stress were lower for officer POWs than for enlisted POWs (Table 9).

3. POWs, on the average, did not gain a more definite purpose or meaning in life through their experiences (Table 4).

4. Beck Depression Inventory scores were negatively correlated with PIL scores in the POW, the Combat and the combined groups (Table 29).

5. Beck Depression scores were correlated with Intensity of Stress scores in the POW, the Non-combat and the combined groups (Table 29).

6. Purpose in Life scores were negatively correlated with Intensity of Stress scores in the POW and combined groups (Table 29).

7. World War II European Theater former POWs demonstrated signs of mild clinical depression, on the average (Table 4).

8. The relationship theory between daily stress and future psychological well-being received support (Table 29).

9. World War II Combat and Non-combat veterans showed signs suggestive of the presence of a definite purpose or meaning in life (Table 4).

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APPENDICES

APPENDIX A

PURPOSE IN LIFE TEST

NAME _____ DATE _____

AGE _____ SEX _____ CLASSIFICATION _____

P I L

James C. Crumbaugh, Ph. D.
Veterans Administration Hospital
Gulfport, Mississippi

Leonard T. Maholick, M.D.
The Bradley Center, Inc.
Columbus, Georgia

PART A

For each of the following statements, circle the number that would be most nearly true for you. Note that the numbers always extend from one extreme feeling to its opposite kind of feeling. "Neutral" implies no judgment either way; try to use this rating as little as possible.

1. I am usually:

1	2	3	4	5	6	7
completely bored			(neutral)			exuberant, enthusiastic

2. Life to me seems:

7	6	5	4	3	2	1
always exciting			(neutral)			completely routine

3. In life I have:

1	2	3	4	5	6	7
no goals or aims at all			(neutral)			Very clear goals and aims

4. My personal existence is:

1	2	3	4	5	6	7
Utterly meaningless without purpose			(neutral)			very purposeful and meaningful

5. Every day is:

7	6	5	4	3	2	1
constantly new			(neutral)			exactly the same

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Munster, Indiana 46321

Test #168
Form B

6. If I could choose, I would:

1	2	3	4	5	6	7
prefer never to have been born			(neutral)			Like nine more lives just like this one

7. After retiring, I would:

7	6	5	4	3	2	1
do some of the exciting things I have always wanted to			(neutral)			loaf completely the rest of my life

8. In achieving life goals I have:

1	2	3	4	5	6	7
made no progress whatever			(neutral)			progressed to complete fulfillment

9. My life is:

1	2	3	4	5	6	7
empty, filled only with despair			(neutral)			running over with exciting good things

10. If I should die today, I would feel that my life has been:

7	6	5	4	3	2	1
very worthwhile			(neutral)			completely worthless

11. In thinking of my life, I:

1	2	3	4	5	6	7
often wonder why I exist			(neutral)			always see a reason for my being here

12. As I view the world in relation to my life, the world:

1	2	3	4	5	6	7
completely confuses me			(neutral)			fits meaningfully with my life

13. I am a:

1	2	3	4	5	6	7
very irresponsible person			(neutral)			very responsible person

14. Concerning man's freedom to make his own choices, I believe man is:

7	6	5	4	3	2	1
absolutely free to make all life choices			(neutral)			completely bound by limitations of heredity and environment

15. With regard to death, I am:

7	6	5	4	3	2	1
prepared and unafraid			(neutral)			unprepared and frightened

16. With regard to suicide, I have:

1	2	3	4	5	6	7
thought of it seriously as a way out			(neutral)			never given it a second thought

17. I regard my ability to find a meaning, purpose, or mission in life as:

7	6	5	4	3	2	1
very great			(neutral)			practically none

18. My life is:

7	6	5	4	3	2	1
in my hands and I am in control of it			(neutral)			out of my hands and controlled by external factors

19. Facing my daily tasks is:

7	6	5	4	3	2	1
a source of pleasure and satisfaction			(neutral)			a painful and boring experience

20. I have discovered:

1	2	3	4	5	6	7
no mission or purpose in life			(neutral)			clear-cut goals and a satisfying life purpose

APPENDIX B

DAILY STRESSORS QUESTIONNAIRE

Directions: Stressors are stimuli (events, occurrences or images) that can range from minor annoyances to major pressures, problems or difficulties. They can occur few or many times.

Listed from 1-75 on the following pages are a number of ways in which a person can feel stressed. First, circle the stressors that happened to you while in the military service. Then look at the number on the right of the item you have circled. Indicate by circling a 1, 2, or 3 how severe each of the circled stressors were for you. If a stressor did not occur in the military, DO NOT circle it. Use bhe back of the final page to list and indicate severity of any stressors I may have missed.

Please add any comments you would like to make at this time also.

APPENDIX B

DAILY STRESS

		Somewhat	Moderate	Extreme
		Severity		
1.	Abrupt removal from unit, friends, etc.	1	2	3
2.	Inadequate substitution for shelter, food, etc.	1	2	3
3.	Introduction of new culture, race, etc.	1	2	3
4.	Break-up of unit, friends, etc.	1	2	3
5.	Exclusion from original social group	1	2	3
6.	Confiscation of personal property	1	2	3
7.	Death of friends or no knowledge of their fate	1	2	3
8.	Restriction of basic needs	1	2	3
9.	Prolonged state of terror, fear or anxiety	1	2	3
10.	Black-out of radio/newspaper info of war	1	2	3
11.	Thoughts of suicide	1	2	3
12.	Threats of death or torture	1	2	3
13.	Removal of privacy of bowel movements	1	2	3
14.	Depersonalization (loss of personal identity)	1	2	3
15.	Abolishment of religious worship	1	2	3
16.	Desecretion of the dead	1	2	3
17.	Blocking of reading and/or writing	1	2	3
18.	Prohibition of hope	1	2	3
19.	Betrayal by others	1	2	3

		Severity		
20.	Lengthy roll calls	1	2	3
21.	Withholding or lack of clothing	1	2	3
22.	Absence of sympathy	1	2	3
23.	Crowding of living/sleeping quarters	1	2	3
24.	Sick/dying housed with healthy	1	2	3
25.	Surgical operations without anesthesia	1	2	3
26.	Inadequate removal of dead	1	2	3
27.	Unnecessary operations or medical exams	1	2	3
28.	Absence of dental care	1	2	3
29.	Required or forced "slave" labor	1	2	3
30.	Bad or dangerous working conditions	1	2	3
31.	Theft among friends	1	2	3
32.	Interference with sleep or rest	1	2	3
33.	Extreme weather conditions	1	2	3
34.	Group punishment for individual offenses	1	2	3
35.	Solitary confinement or separation	1	2	3
36.	Beating or killing by random selection	1	2	3
37.	Forced attendance at executions or beatings	1	2	3
38.	Punitive work or beatings	1	2	3
39.	Overcrowding	1	2	3
40.	Insufficient heat or cooling temperatures	1	2	3
41.	Insufficient food or starvation	1	2	3
42.	Lack of soap, water or cleanliness	1	2	3

		Severity		
43.	Extended marches	1	2	3
44.	Overcrowded transportation	1	2	3
45.	No toilet facilities	1	2	3
46.	Inability to rid self of lice or vermin	1	2	3
47.	Lack of eating utensils or facilities	1	2	3
48.	Problems getting along with others	1	2	3
49.	Trouble relaxing	1	2	3
50.	To much time on hands	1	2	3
51.	Concern about accidents, illness or pain	1	2	3
52.	Loneliness	1	2	3
53.	Fear of confrontation	1	2	3
54.	Inability to express oneself	1	2	3
55.	Physical illness or disability	1	2	3
56.	Physical appearance	1	2	3
57.	Sexual problems	1	2	3
58.	Concerns about health	1	2	3
59.	Concerns regarding combat, attacks or bombing	1	2	3
60.	Not seeing enough people	1	2	3
61.	Preparing meals	1	2	3
62.	Declining physical abilities	1	2	3
63.	Declining mental abilities	1	2	3
64.	Exploitation	1	2	3
65.	Concerns about bodily functions	1	2	3
66.	Too many things to do	1	2	3

		Severity		
67.	Inner conflicts (right vs. wrong, etc.)	1	2	3
68.	Regrets over past decisions	1	2	3
69.	Nightmares	1	2	3
70.	Difficulties seeing or hearing	1	2	3
71.	Noise	1	2	3
72.	Threats by civilians	1	2	3
73.	Lack of intellectual or physical activities	1	2	3
74.	Thoughts of impending death	1	2	3
75.	"Brainwashing" or propaganda	1	2	3

Have I missed any of your daily hassles, stressors or trauma? If I have, please list them below:

_____	1	2	3
_____	1	2	3
_____	1	2	3

APPENDIX C

RESEARCH PARTICIPANT INFORMED CONSENT

The study that you have volunteered to participate in concerns your experiences as a veteran during the course of World War II. You will be asked to respond to four separate questionnaires that relate to your past experiences and present situation and/or feelings or attitudes.

Several of the questionnaires that you will be asked to respond to concern your experiences as a veteran and may bring back memories that are painful, stressful or difficult to forget. If you feel that you are unable to answer all the appropriate questions then you may withdraw from participation or complete the items at a later time. It will take between one and two hours to complete the questionnaires.

I ask that you please do not put your name on any of the research forms other than this informed consent. Your responses will be numbered, placed in the appropriate research groups and possibly used for future research purposes. At no time will your name be released or used without your written consent to do so.

If at any time during the study you have any questions or concerns you may contact me by calling collect at 913-273-5837 or writing me at 3223 Twilight Ct. #104, Topeka, Kansas 66614. Robert P. Anderson, Ph.D. of the Psychology Department of Texas Tech University is my faculty sponsor and may also be contacted if necessary at 806-742-3737.

At the completion of this study you will be mailed, if requested, a brief description of the study and the results that were obtained. A completed version of the study will be available in the Psychology Department of Texas Tech University after all data has been collected, analyzed and accepted by university officials.

I hereby authorize the use of all data obtained from participation in this study:

Signed:_____ Date:_____

APPENDIX D

POW DEMOGRAPHIC QUESTIONNAIRE

1. Age:

   Present_____ Entered Service_____ On capture_____

   Repatriation_____ On discharge_____.

2. Approximate date of induction_____,

   Date of discharge_____.

3. Branch of service:_____.

4. Highest rank in service:_____, Grade:_____.

5. Marital status: (optional)

   Present_____ On induction_____

   Discharge_____

6. Theater(s) in which you participated:

   _____

7. What was your duty or MOS:_____

   _____

8. Name(s) of country(ies) in which you were a prisoner:

   _____

9. Approximate time served in actual combat before

   capture:_____

10. Approximate time served in a combat zone before

    capture:_____

11. Injuries incurred prior to capture:_____

    _____

12. Injuries incurred during capture:_____

_____

_____

13. Approximate date of capture:_____

14. Approximate date of repatriation:_____

15. Briefly describe the circumstances of your capture:

_____

_____

16. Did the VA give you a disability rating after discharge:_____

If yes, what percentage: (optional)_____

17. Did you attend school after discharge:_____

18. What was your highest educational attainment:_____

_____

19. What was the first civilian job you held:_____

20. What was the longest period of continuous employment since discharge:_____

21. How many different jobs have you held since discharge:

_____

22. Approximate average annual income: 10,000 or less____

10,000-20,000_____ 20,000-30,000_____ 30,000+_____

23. How would you describe your present state of health:

Excellent_____ Good_____ Fair_____ Poor_____

24. Despite the many negative aspects of your military service, were there any positive aspects to your experience? If so please explain briefly below:

_____

_____

_____

25. Please add any additional comments you wish to make:

_____

_____

_____

26. To what extent do you feel that your military experience or other life experiences have affected your current attitude? Please explain briefly below:

_____

_____

_____

_____

(use other side if necessary)

APPENDIX E

COMBAT AND NON-COMBAT DEMOGRAPHIC QUESTIONNAIRE

1. Age:

   Present____ Entered Service____ At discharge____

2. Date of induction_____

3. Date of discharge_____

4. Type of discharge (optional)_____

5. Branch of service_____

6. Highest rank in service_____, Grade_____

7. Marital status:

   Present_____ At induction_____

   At discharge_____

8. Theater(s) in which you participated:

   _____

9. What was your duty or MOS:_____

   _____

10. Approximate time served in actual combat:_____

11. Approximate time served in combat zone:_____

12. Injuries incurred during service:_____

    _____

    _____

13. Did the VA give you a disability rating after discharge:_____

    If yes, what percentage: (optional)_____

14. Did you attend school after discharge:_____

15. What was your highest educational attainment:_____

_____

16. What was the first civilian job you held:_____

17. What was the longest period of continuous employment since discharge:_____

18. How many different jobs have you held since discharge:

_____

19. Approximate average annual income: 10,000 or less___ 10,000-20,000_____ 20,000-30,000_____ above 30,000__

20. How would you describe your present state of health: Excellent_____ Good_____ Fair_____ Poor_____

21. Despite the many negative aspects of your military service, were there any positive aspects to your experience? If so please explain briefly below:

_____

_____

_____

22. Please add any additional comments you wish to make:

_____

_____

_____

23. To what extent do you feel that your military experience or other life experiences have affected your current attitude? Please explain briefly below:_____

_____

_____

(use other side if necessary)

APPENDIX F

BECK DEPRESSION INVENTORY

BECK INVENTORY

Name_____ Date_____

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the PAST WEEK, INCLUDING TODAY! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. **Be sure to read all the statements in each group before making your choice.**

1 0 I do not feel sad.
1 I feel sad.
2 I am sad all the time and I can't snap out of it.
3 I am so sad or unhappy that I can't stand it.

2 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.

3 0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person.

4 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.

5 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

6 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

7 0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.

8 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.

9 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

10 0 I don't cry any more than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.

11 0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me.

12 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.

13 0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.

14 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.

15 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

16 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

17 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

18 0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.

19 0 I haven't lost much weight, if any, lately.
1 I have lost more than 5 pounds.
2 I have lost more than 10 pounds.
3 I have lost more than 15 pounds.
I am purposely trying to lose weight by eating less. Yes____ No____

20 0 I am no more worried about my health than usual.
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
2 I am very worried about physical problems and it's hard to think of much else.
3 I am so worried about my physical problems that I cannot think about anything else.

21 0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

APPENDIX G

SUMMARY TABLES FOR ANOVA ON DIFFERENCES BETWEEN POW, COMBAT AND NON-COMBAT GROUPS FOR EACH DEPENDENT VARIABLE

APPENDIX G

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON DIFFERENCES BETWEEN POW, COMBAT AND NON-COMBAT GROUPS FOR THE FREQUENCY OF STRESS VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Group	29269.21	2	14634.60	43.96	0.01
Error	40279.27	121	322.89	--	--
Total	69548.48	123	--	--	--

APPENDIX G

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON DIFFERENCES BETWEEN POW, COMBAT AND NON-COMBAT GROUPS FOR THE INTENSITY OF STRESS VARIABLE

Source	SS	df	MS	F	p
Group	160407.85	2	80203.92	49.20	0.01
Error	197239.86	121	1630.08	--	--
Total	257647.71	123	--	--	--

APPENDIX G

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON DIFFERENCES BETWEEN POW, COMBAT AND NON-COMBAT GROUPS FOR THE BECK DEPRESSION INVENTORY VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Group	1517.77	2	758.89	17.27	0.001
Error	5317.67	121	43.95	--	--
Total	6835.44	123	--	--	--

APPENDIX G

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE ON DIFFERENCES BETWEEN POW, COMBAT AND NON-COMBAT GROUPS FOR THE PURPOSE IN LIFE VARIABLE

Source	SS	*df*	*MS*	*F*	*p*
Group	6522.97	2	3261.48	11.72	0.0001
Error	33659.45	121	278.18	--	--
Total	40182.42	123	--	--	--

APPENDIX H

MEANS AND STANDARD DEVIATIONS OF LOW AND HIGH STRESS POW GROUPS

APPENDIX H

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE BETWEEN LOW AND HIGH STRESS POWS ON EACH DEPENDENT VARIABLE

Beck Depression Inventory

Source	SS	df	MS	F	p
Frequency of Stress	246.89	1	246.89	3.53	0.07
Error	3704.86	53	69.90	--	--
Total	3951.75	54	--	--	--

APPENDIX H

SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE BETWEEN LOW AND HIGH STRESS POWS ON EACH DEPENDENT VARIABLE

Purpose in Life

Source	SS	df	MS	F	p
Frequency of Stress	1148.01	1	1148.01	2.82	0.10
Error	21605.92	53	407.66	--	--
Total	22753.93	54	--	--	--

APPENDIX H

MEANS AND STANDARD DEVIATIONS OF LOW AND HIGH STRESS POW GROUPS

Variables	Low Stress (n=28)		High Stress (n=27)	
	Mean	S.D.	Mean	S.D.
Purpose in Life	104.25	20.21	95.11	20.17
Beck Depression Inventory	11.42	6.66	15.67	9.82

APPENDIX I

COMPARISON OF THE LOW STRESS POW SUBGROUP WITH THE HIGH STRESS COMBAT SUBGROUP ON THE PIL AND BDI DEPENDENT VARIABLES

Variables	POW (n=22)		Combat (n=5)	
	Mean	S.D.	Mean	S.D.
Purpose in Life	106.50	20.07	107.80	20.18
Beck Depression Inventory	10.63	6.21	9.40	6.80

APPENDIX J

SELECTED SUBJECT'S COMMENTS REGARDING THEIR EXPERIENCES

The following comments are quotes taken from selected subject's surveys and are generally representative of the subject's responses to the question: "To what extent do you feel that your military experience or other life experiences have affected your current attitude?" Please explain briefly below: (Appendices D and E)

"Every young man should have two years of military training."

"Military experience had a positive effect on my outlook and attitude on life."

"I have learned to appreciate freedom, a lot more. Would return to service if recalled."

"Developed a hostile attitude toward authority in most cases."

"It helped me to grow up to be independent--look out for yourself and stand up for your rights."

"I learned self-respect and to work as a team."

"I don't think the people as a whole appreciate what or realize what it was like to be a POW."

"When things get tough just 'Hunker Down' and things eventually will improve."

"I learned the hard way that prayers are answered."

"I have difficulty at times controlling my anger."

"Fostered better understanding of different cultures and attitudes."

"Made me aware of the need to live a full life and forget the past."

"I am grateful for every aspect of life and indeed feel fortunate to be alive."

"I feel one aspect of my former survival was to dissiminate these thoughts to all who ask or to whom I have access."

" . . . affected ability to feel and show emotion."

"It was a maturing experience."

"I would not do it again for a million dollars but would not sell my experience for a million."

" . . . travel in foreign countries . . . educational different cultures."

" . . . we were fighting to make the world free of the mad men like Hitler and for the love of our country."

"Probably changed my life completely. . . ."

"I think I have a different outlook about life and death."