THE PSYCHOLOGY OF SURVIVAL:
EFFECTIVE COPING STRATEGIES USED IN NAZI CONCENTRATION CAMPS
(Implications For The Elderly)

BY

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This work is dedicated to all those
who have suffered grievously at the
hands of irrational others
and most especially
to one who has always borne her cross
of sorrows with quiet dignity
my mother, Josephine.
(Mary Joseph Mosher)

and

for "Robin Hood"
my love, my inspiration, my friend.
(Michael P. Sherwood, M.D.)
1939-1976
ACKNOWLEDGMENTS

I thank the Department of Gerontology which financially supported much of this dissertation. It is for that reason I chose to tie a study of Holocaust survivors to some of the problems which many among the elderly encounter. Granted that such a parallel teases the logic of all that we know about the Holocaust. Yet, if we are to demonstrate our conviction that the Holocaust is not a historical footnote and that the lessons from that time are relevant today, we must find points of identification and a place to implement this understanding. While initially I confess to having a real struggle trying to find anything in life which could even be compared to the experiences of the Nazis' victims, I also found as I went deeper into this research, that even if certain parallels are not always perfect they nevertheless reflect the primary objective of this, or any present day study of Holocaust victims. That is, quite directly, if this can happen to any one group of people, all groups of people are vulnerable. I only hope that in my attempt to draw a parallel between Holocaust victims and the general older population today that it has been done with sensitivity, that I have offended no one, and that we recognize through the intellectual labor that there really is no parallel and hopefully never will be one.

I have long been interested in World War II, and particularly the tragic experiences of Nazi victims. But in reading the psychological literature on survivors I had never questioned the repeated results that all the survivors were mentally disturbed. These results, considered from a naive personal perspective, seemed imminently logical. Yet a certain sentiment and belief in the often awesome potential of the human race, always troubled me in reading this body of literature. A few years ago I met a survivor who so obviously and vividly believed all that I had read on the subject that a topic concerning the healthy survivor came into being. For that notion and the years of personal research
which continually evidenced the strength, dignity, and positive expression of the survivor, I owe thanks to Rita Hofrichter who served as my initial inspiration and subsequent model for this dissertation. Since meeting Rita many Holocaust survivors have come to my attention who reaffirmed again and again, not the results of bestiality but the beauty of an inner spirit which can survive such external horror. The survivors have not just "survived." Many of them have gone on to reestablish families and to contribute magnificently in the community to which they immigrated. They have emerged from an unimaginable tragedy with a sublime understanding for human frailty. Many emerged even with a sense of humor, and incredulous as it may seem, a sincere forgiveness of their fellow human beings who allowed this to happen. I thank all the survivors who so graciously agreed to be in this study. It is always a difficult task for the survivors to recount their stories for it instantly recalls an endless torment, a painful wound that can never be healed. Yet they endure and go beyond so that others may profit from their painful knowledge, so that we may hopefully educate a world for a better future to counteract their dreadful past.

This dissertation was a difficult and sometimes depressing undertaking. It represents not so much my own work but the result of support from a loving family and a few extraordinary friends. Each of the following persons mentioned provided either a key to some difficult problems in this study or personal support when the going almost "got up and went."

They say that a student's doctoral committee "can make or break you." My committee, whether close at hand or long distance, was responsive, supportive, and directed me with judicious comments and thoughtful reviews. Each person on my committee, at one time or another, supported me through either an intellectual or personal crisis. I am grateful to all of them.
My beloved friend, Samm Nevergall, literally opened her home to me. The situation was symbolic for in a heart crowded with people, she has always found a place for me. I thank her sincerely for her unfailing encouragement and support.

Pamela Cooper was there for me during some very bitter moments, from the initial conceptualization of this paper 7 years ago to its final conclusion. Her tiny shoulders have carried many of my burdens.

My brother broke a "writer's block" of two years standing and read reams of the initial first draft simply because it needed to be done and he is one of the most generous and kindest people I have ever known.

Dr. Michael Epstein spent almost every Friday night taking me out on dates that were a camouflage for just another long tedious evening of responding to my often desperate requests for academic assistance. Michael's scintillating brilliance balanced by a profound sense of compassion and action combine to blend into what the poets would describe as a truly "beautiful man."

Dr. Myron Goldberg literally did the impossible — he guided me through the turbulent seas of statistics. And my dear "Mo" proved to have a sensitive soul behind that stunning intellect.

Dr. Mildred Nitzberg read through every word of my research proposal and edited it with a fine and delicate hand. Her husband Dr. Saul Nitzberg, who is a survivor, read through my sections on the Holocaust so that my "book facts" could be relatively accurate.

Joanne Potter, a brilliant young lady and one of my student assistants, worked conscientiously, loyally and with dedication approaching devotion. Her assistance in the collection of the data, her willingness to do whatever was asked, whenever it was needed, were a continual incentive to me.
Marty Bloom, my dear and gentle love, was there every time I needed him, and I needed him all the time. His insight and compelling arguments to finish this dissertation served to brace me every time I weakened and wanted to quit. His practical suggestions and emotional support were invaluable to the completion of this dissertation. Thank you my darling Marty.

Sheila Korman is the prototype for "friend." You, my dear, are the best of the best. I am humbled in trying to describe the impact you have had on my life and the gratitude I feel for the treasure of your friendship.

I save my last thanks to the one person who can never really be thanked adequately because what she has done for me exceeds any explanation in words. Goldie Goldstein, the Executive Vice President of The Southeastern Florida Holocaust Memorial Center, quite simply, made this dissertation possible. If one is extraordinarily fortunate in life, they may meet someone like Goldie. She cannot be described except in a platitudinous gush of praises, all of which are absolutely true. She is the embodiment of the finest human being one can imagine. Because of her support and the consequential adherence to her feelings on the part of her marvelous staff, this dissertation came to be realized. These are not idle words. Each person on her staff gave me time they didn't have and added perceptions to this paper that would otherwise not have been harbored by the author. They changed my frantic, dark moods when they could, and kept silent when they couldn't. Thank you Cele Lakin, Jack Levine, Rositta Kenigsberg, and Lucille Rosenberg. All of you were so terribly kind to me.

And finally, for J.L.H. if you still walk upon this earth, and my heart tells me you do, this work like all good things in my life, is also for you.
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THE PSYCHOLOGY OF SURVIVAL: EFFECTIVE COPING STRATEGIES USED IN NAZI CONCENTRATION CAMPS (Implications For The Elderly)

By

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April, 1984

Chairman: Theodore Landsman
Cochairman: Dorothy D. Nevill
Major Department: Counselor Education

Contrary to popular opinion there have been few systematic studies of Nazi concentration camp survivors. Of particular interest are the coping methods these survivors used to confront the magnitude of stresses they endured while interned in the concentration camps. Most studies of Holocaust survivors have neglected this issue or have assumed that the survivors coping reactions were without merit due to the heavily weighted factor of luck in survival or an a priori assumption that all survivors suffer, to one degree or another, from a severe mental disorder called the "survivor syndrome."

The present study explored the possibility that many survivors are, in fact, fully functioning, well adjusted persons whose personal history rather than personality includes the horrendous trauma of the Holocaust. Survivors were interviewed in depth about their Holocaust experiences and completed background questionnaires and a Life Satisfaction Index (LSIZ). From the
literature an inventory of 42 different coping mechanisms was developed. The
interviews were then analyzed to determine which, if any, of the 42 mechanisms
the survivors used to cope with their internment in the Nazi concentration
camps.

The data were analyzed from the perspective of ascertaining which of two
coping styles (social-active or psychological-defensive) was more or less related
to life satisfaction. Results of an unweighted analysis of coping mechanisms
indicated that the use of a social-active style to confront the stress of
imprisonment in the Nazi concentration camps was significantly related to
current life satisfaction.

The usage of one specific defense, denial, was examined but was not found
to relate significantly to present life satisfaction. Other mechanisms, however,
significantly differentiated well-adjusted and less well-adjusted groups on mean
life satisfaction scores and these are discussed.

Finally, while the number of mechanisms used did not significantly relate to
current life satisfaction, certain other variables did, particularly the length of
time a person was in the concentration camps. This finding supports the concept
of time evaluation as a critical variable in stress research.

Given the added stresses which aging typically brings, the findings may have
particular relevance to older populations. This, as well as recommendations for
future research, are discussed.
CHAPTER I
INTRODUCTION

Description of the Study

This study identified the various coping responses selected by persons under extreme stress and related these responses to adjustment in later years. Holocaust survivors who had been in Nazi concentration camps were interviewed in depth regarding their experiences while imprisoned. From these interviews the coping mechanisms that they used were extracted. Using current life adjustment as a criterion, the relationships of coping mechanisms and coping styles with long term effectiveness were then analyzed.

Statement of the Problem

The demands induced by major changes in later adulthood present particular stresses for the elderly. As Poon (1980) stated, "not only are the social, physical and economic losses associated with the aging process stresses in themselves, but they also constitute decrements in resources available to the older person to cope with subsequent stresses" (p. 344). The state of well-being in later life then may very well depend upon the older person's ability to cope with various stresses.

Studies of stress have concentrated either on selected life events which are assumed to induce stressful change or adaptation following change. However, such a bipolar examination does not provide a bridge for understanding how, exactly, one leads to the other. Thus the specific question is not what changes were stressful, but how were they managed? The implications for finding the answer are both broad and practical. For example, the identification of
effective coping mechanisms has clinical implications for therapists who are assisting their clients in selecting effective strategies in living. Because of their increased vulnerability to stress and the cumulative nature of stresses which aging implies, such findings could be particularly valuable for the elderly population. That is, if we have an understanding of how certain persons coped with stressful changes equivalent to those which the elderly must confront and if we can then determine which of these coping mechanisms or styles of mechanisms (e.g., an interpersonal versus a defensive style), are related to healthy adjustment, perhaps we can guide the elderly in using more effective strategies for coping with stress.

**Purpose of the Study**

The purpose of this study was to meet the foregoing objectives through an intimate examination of the coping responses different individuals used to manage the extremely stressful circumstances of survival in a Nazi concentration camp. A detailed analysis of these coping responses may enhance our understanding of both the typical, observable responses to stress as well as the less detectable but equally important unobtrusive tactics generally referred to as defense mechanisms.

Since the value of these coping strategies can only be estimated in terms of their consequences, an additional necessary examination of present life adjustment was undertaken to determine the possible relationship between particular coping mechanisms or styles of coping and their potential long term benefit.

This study rests on the premise that mental "health" includes a wide range of behaviors, thoughts, and feelings. We may be able to learn some highly pragmatic information from those concentration camp survivors whose life adjustment attests to their position in the "upper range" of mental health. If the types of coping mechanisms used by these survivors under extreme stress happen
to be similar, and if these mechanisms are markedly dissimilar from those used by survivors at the "lower range" of the mental health continuum, we may then evaluate the effectiveness of certain types of coping responses with some degree of confidence. Furthermore, it is not unreasonable to assume that successful coping mechanisms used in one situation, the concentration camp, would be any less successful in other stressful circumstances.

Consequently, the purpose of this study was twofold. First, since in spite of the burgeoning interest in stress little is known about psychological coping, a descriptive list of coping responses was developed based on an actual life situation. Second, the individual coping responses were examined in terms of their long term effects as evaluated by adjustment in later life. The premise inherent in this investigation is that the relationship between coping mechanisms and adjustment may reflect the relative effectiveness of these different mechanisms. The result of such an effort has hopefully provided an evaluative understanding of the merits of different coping responses from which the older person or the helping professional may then select a particular strategy or coping style with some sense of confidence in its effectiveness.

Need for the Study

A study to detect effective coping strategies for the elderly is warranted for at least three major reasons. First, it has been said that "widowhood, late life marital and sexual problems, retirement, sensory loss, aging, disease, pain, hospitalization, surgery, institutionalization, and dying are among the major crises of old age" (Butler, 1975, p. 418). The stress from these typical major changes in later life challenges the coping ability of many elderly persons. In fact, Pfeiffer (1977) concluded that most mental pathology in later life is due to the failure of the older person to cope with stress. Therefore, learning to select and use successful coping responses may help the elderly to prevent
inevitable life changes from becoming overwhelmingly stressful. Further, the 
availability of the older individual to cope effectively may increase self-esteem, 
diminishing the need for outside assistance, and increase independence, factors 
which are known to be strongly associated with psychological health.

Second, it would seem reasonable to expect that research would have 
responded to the need to examine the relative effectiveness of coping mecha-
nisms that can be used by older persons. However, while considerable emphasis 
has been given to the physiological responses to stress (Buckley, 1972; Laborit, 
1959; Selye, 1974), the psychological components remain obscured or neglected. 
In point of fact, the entire field of stress research has been largely dominated 
by the monumental work of Selye (1956) whose "adaptation syndrome" appeared 
to answer all the questions regarding the psychology of stress. However, as 
Lazarus (1964) points out, this work actually "leaves all the psychological ques-
tions untouched. Selye has added perhaps to the measures indexing stress, and 
to our sophistication about the physiological mechanisms underlying these 
measures but not to the understanding of the psychological processes that 
determine when a stress reaction will or will not occur" (p. 55). Since this point 
is not well recognized however, the current outpouring of studies in stress often 
confounds the physiological and psychological reactions.

The theoretical and methodological problems inherent in the 
field of psychological stress will never be solved merely by 
repeated demonstrations that this or that condition results 
in a blood-chemistry effect, a change in affect, or an 
autonomic-nervous-system reaction — unless at the same 
time attention is given to the psychological processes 
involved and to the empirical conditions which identify 
these processes" (Lazarus, 1964, p. 56).

Specific studies in the psychological domain of stress have emerged 
primarily through three routes: the laboratory, personality assessment and to a 
lesser extent, naturalistic observations of traumatic events. In the first case, in 
spite of some extremely creative designs, the laboratory analogue has been
seriously challenged. It is questionable as to whether or not the laboratory can truly parallel, or is similar to, the type of stress and resultant processes that are postulated to take place in nature. Similarly, in the personality domain there have been a number of efforts to identify characteristic mechanisms used to cope with stress. The majority of these analyses, however, are based on assessments by paper and pencil tests rather than by actual observation of what the person says or does in a particular stress situation. The utility of paper and pencil tests depends on the adequacy of the personality assessment and the generality of the coping process being measured. Unfortunately, in both the laboratory approach and the personality measurement approach many psychological processes, including coping styles, show very limited generality (Cohen & Lazarus, 1973; Mischel, 1968). The viable alternative is "to observe an individual's behavior as it occurs in a stressful situation and then proceed to infer the particular coping processes implied by the behaviors. This approach has been largely neglected in the study of coping" (Monat & Lazarus, 1977, p. 11).

Finally, regardless of the approach used for classifying and/or measuring coping processes, we are still uncertain as to the benefit of any one mechanism or combination of mechanisms, particularly as they relate to long-term, successful outcome. Indeed, recent findings indicate that the effects of life stress may not be fully apparent until later adulthood. This observation can only underscore the importance of assessing the coping response to stress in light of its long term consequences. Furthermore, that such consequences may have a beneficial impact is a point largely unexplored in the literature. "While much is known about the damaging effects of stress, less systematic attention has been devoted to the ways in which human beings respond to stress positively" (Monat & Lazarus, 1977, p. 8).
Thus, in addition to understanding the types of stressful conditions which the elderly generally must confront, there is a need to study the coping mechanisms actually used during stress and to see their relation to later life adjustment. There are, then, three related questions: (1) what are the nature and intensity of the stressors inherent in the major changes confronted by the elderly? (2) what are the coping mechanisms which could be used to moderate these stressors? and (3) what are the psychological consequences of the coping response(s), as expressed by healthy outcome in the elderly? The first question considers the parameters of a study of stressful major changes for the elderly. The second question examines the relationship of stress to outcome. The third question responds to our knowledge that stress need not always be debilitating and if handled appropriately, could actually promote positive well-being.

**Direction of Research on Stress in the Elderly**

**Major Changes Facing the Elderly.** Much of the research on stress has explored the effects of major changes. Retirement, the loss of a spouse, relocation to a new environment, general decline in health, diminished income, and reduction in status are all major changes which have been shown to be more stressful for the elderly than for younger populations (Martin, Bengtson, & Acock, 1974). It has also been found that the increased degree of stress for the elderly is associated with feelings of alienation and anomie, which are more severe in later adulthood when there is a concomitant decline in physical and psychological resources (Seeman, 1976).

The study of stressful or major change has generally been considered synonymous with the "life-events" approach inaugurated by Holmes and Rahe (1967). The past decade has witnessed a prolific production of studies following this approach. In essence, a life-events scale asks respondents to identify specified changes over a period of a year or so and the extent of social readjustment
required by each change. Of late, however, this approach has come under serious criticism, not the least of which is that the elderly have been excluded. Second, such a method invites distortion of the relative effects of each event since the presumed stress from each situation may not be the same for each respondent. Also, life-events research is generally tied into a one year framework, so that long term effects are virtually ignored. Finally, the life-events approach tells us nothing of how the individual coped with the specified changes.

The latter two criticisms are interrelated since not only can the effects of stress remain obscured until years later, but as Lazarus and Launier (1978) point out: "the ways people cope with stress are even more important to overall morale, social functioning, and health/illness than are the frequency and severity of episodes of stress themselves" (p. 308). Unfortunately, "while the concept of coping is intimately tied to that of stress, it has been largely neglected by researchers until rather recently" (Monat & Lazarus, 1977, p. 11).

Coping Mechanisms. Most of the research in stress has assumed a direct relationship between major changes and outcome. Kanner, Coyne, Schaefer, and Lazarus (1981) point out that such an approach which ignores mediators, "is [not only] increasingly controversial, but seems to us also to be increasingly untenable" (p. 8). While Poon (1980) in his extensive review of the literature on aging states that "the results have demonstrated convincingly the link between stress and both physical and mental health" (p. 343), this is clearly not a direct relationship. Rather, certain coping mechanisms intervene to translate the stressful experience and effect individual outcomes.

Coping as defined by Lazarus and Launier (1978) are those "efforts, both action-oriented and intrapsychic, to manage (i.e., master, tolerate, reduce, minimize) environmental and internal demands, and conflicts among them, which tax
or exceed a person's resources" (p. 311). However, the attempt to decipher effective coping responses has been complicated by well-intentioned laboratory efforts. Laboratory "stress" may not be perceived the same as real life stress, yet the results are often generalized as if they were comparable. Another methodological problem is that artificial situations often rely on the response of the subjects in terms of what they would do and we cannot be sure that this measure of intention is an accurate representation of real life response. Besides the foregoing problems inherent in laboratory studies, few such experiments include elderly subjects or design their methodology so that the results may be applicable to older populations.

Other approaches to stress generally do not include coping. For example, the life-events approach precludes consideration of coping responses. There are, however, a few notable exceptions. Some studies look at how the elderly cope with extreme situations as, for example, widowhood and terminal illness. Yet this unitary perspective of an isolated life transition fails to consider the complex state of stress. For example, the loss of a spouse in and of itself may symbolically or actually include a variety of losses, smaller changes, ambiguities, and so forth. The compilation of problems incurred in any major change, especially for the older person, warrants an examination of like processes which cannot be found in the interesting, but limited, traditional gerontological approach. One such situation which dramatically embodies the magnitude of stress encountered in the entire spectrum of conceivable life changes is the Nazi concentration camp experience.

Assuredly there are many important differences between the extremity of the circumstances faced by the concentration camp prisoner and the "ordinary" stress encountered by the older person today. But there are also very
noteworthy similarities, and we have much to learn from the concentration camp survivors about the effects, short and long term, of stress.

The survivors who are able and willing to talk about their experience in the camps can teach us much about coping. Several investigators have pointed out that while the concentration camp experience is horrifyingly unique, the specific coping strategies are not different than those used to deal with everyday stress (Benner, Roskies, & Lazarus, 1980). Furthermore, the camp experience included many of the unfortunate realities to which many among the elderly are subjected. These include malnutrition, isolation from loved ones, overcrowding, impoverishment, and the continual threat of death. For both the internee and the elderly, there is a depletion of physical, mental, financial and other resources, with a consequential individual inability to manage the environment. For many people, "growing old" is feared because this state carries with it a not altogether untrue sense of heightened vulnerability. While internment in a concentration camp ensured vulnerability for all victims, Benner et al. (1980) point out that "the content and sources of vulnerability varied among individuals" (p. 222). Ultimately, the way one copes with a situation, whether in a concentration camp or in everyday life, depends not only on the situation, but on the personal resources one brings to bear in the transaction between situation and outcome.

To explore certain basic similarities between the stresses of the camps and everyday life is not to say that there are not also many important differences. Chief among these differences may be the fact that for the internee, the concentration camp was a dehumanizing "world of suffering without meaning" to use one of George Steiner's cogent phrases. Secondly, there was no discernible relief. The persistence of destruction and pain were pervasive and incessant. However, in spite of the meaninglessness of death, there is also clearly depicted
in the literature (which includes a plethora of personal memoirs of survivors), an equally strong sense of the effort to invest meaning in survival. For example, survivors speak frequently of the absolute necessity of finding a friend. Others recall with conviction their desire to live "to bear witness." Through recognition of their pathetically limited control, others codified their behavior into small but significant acts such as choosing not to eat a small crust of bread immediately.

Problems Inherent in Research on Concentration Camp Survivors. Although there is a wealth of information to be found, there appear to be two main reasons why there has been little systematic psychological research conducted with concentration camp survivors. First, immediately following and for several years after World War II the sense of horror for both survivor and investigator remained overwhelming. In fact, the few studies that did appear during this period exhibit a unifying thread of detachment. Even carefully detailed individual case studies, written by psychiatrists and psychologists, often break down at some point into intellectual treatises resplendent with theoretical arguments. Subsequently these studies obscure the deeply felt personal circumstances and reactions of the survivor. Bettelheim (1943), for example, has been repeatedly criticized because of his academic insistence on "guilt" and identification on the part of the victim with the aggressor. He has been faulted because he sought to develop his theoretical stance on the experiences of victims who were in death camps based on his own personal experience in a labor camp. In fact, Bettelheim was incarcerated in a labor camp before the war and well before the Nazis had developed the elaborate and loathsome conditions which became a hallmark of degradation, torture, and annihilation in the war time concentration camps.

In retrospect, it is readily understandable, and perhaps a tribute to the scientific community, that more investigators did not undertake to examine the
concentration camp experience and consequently risk turning a horrifying reality into a placid intellectual exercise.

Correlated with the reluctance to try to reduce the nightmare of the concentration camp into a bit of datum, is the fact that many survivors would not talk of their experience. In One Generation After Elie Wiesel, himself a survivor, says: "Was it not a mistake to testify and by that very act, affirm ... faith in man and word?" (1972, p.15). For many survivors, silence has been the only adequate response to the horror that occurred. Any attempt to translate this extraordinary event into words would only trivialize it.

Many survivors also found that they could not speak — not, as some theoreticians have postulated, because these memories were repressed. Rather, survivors have been silent because until recently no one would listen, or worse, believe. Terrence Des Pres, whose work The Survivor (1977) is held by many historians as the authoritative statement of life and death in the camps, wrote:

As a witness the survivor is both sought and shunned; the desire to hear his truth is countered by the need to ignore him. Insofar as we feel compelled to defend a comforting view of life, we tend to deny the survivor's voice. We join in a "conspiracy of silence," and undermine the survivor's authority by pointing to his guilt. If he is guilty, then perhaps it is true that the victims of atrocity collaborate in their own destruction; in which case blame can be imputed to the victims themselves. And if he is guilty, then the survivor's suffering, all the sorrow he describes, is deserved; in which case a balance between that pain and our own is restored. Strategies like these are commonly employed against survivors. (pp. 43-44).

Another factor which has interacted to suppress scientific investigation is rooted in the typical research framework of experimental design. As more time passed since the war it seemed more and more implausible to cite the wartime experience as a causative factor in present day adjustment. Part of the problem with examining survivors psychologically has been our reluctance to validate subjective recall. The remainder of the issue centers on the problem of time as
confounding variable. With respect to the former point, studies such as Fenz and Epstein's (1967) have emerged which lend credence to the surprising accuracy of recall as compared to such "objective" measures as the Galvanic Skin Response. The second point is answered through a review of the research on traumatic events. Citing the concentration camp as an appropriate example of a traumatic experience, the survivors who are able and willing to speak all evoke their experience as if it were not 38 years ago, but yesterday. In fact, the recognition that the psychological sequelae in survivors of Nazi persecution does not diminish over time has given rise to the term "survivor syndrome" (Grauer, 1969; Berger, 1977; Niederland, 1972). The symptoms of this "syndrome" differ from the more generally known "traumatic neurosis" (Berger, 1977) in several respects and especially in terms of the fact that for the concentration camp survivor, the symptoms exhibited upon release did not abate with time. However, even more surprising is the fact that there is abundant evidence that many of the survivors not only recovered from their experience, but went on to establish themselves, against all odds, as worthy, productive members in completely new societies. In many cases their assimilation into new and completely foreign cultures, their reestablishment of families, and their demographic positions economically, educationally, and socially, all bear the earmarks of a successful adjustment.

Successful Outcome. The third aspect of the psychological components of stress, that is, outcome, has generally relied on the assumption that stress, by its very nature, results in negative consequences. This assumption has also been made in the studies of elderly populations where the stereotype is of one who copes poorly with major changes. This incorrectly implies that many elderly persons have poor psychological health.
An obvious reason for the lack of data on older, psychologically healthy individuals is that "the superbly happy person, the productive and delighted person, rarely finds his way into the psychologist's office" (Landsman, Note 1). Consequently, most psychological studies of the elderly have included only those individuals distressed or otherwise mentally impaired. This subject selection introduces a bias which appears to substantiate the inference that the elderly are psychologically deficient. The inclusion of psychologically healthy individuals in studies of the elderly may refute this general stereotype.

A second reason for our present lack of information on healthy outcome may stem from the traditional usage of the medical model in research. The medical model emphasizes disease and treatment of negative outcome rather than prevention and the potential for positive outcome from negative experience. Use of this model then may obscure those findings when stress is, in fact, associated with improved psychological functioning.

Significance of the Study

In most psychological theories of aging, the concept of stress plays an elemental role. Stress may accelerate the aging process over a given time or it may lead to impairment which manifests as, or interacts with, aging to increase degeneration. Although stress may diminish the reserve capacity of the individual to respond, it may also be viewed as a challenge yielding improved responses (Eisdorfer & Wilkie, 1977).

Over the past few decades, a number of programs designed to alleviate the causes or effects of stress have emerged in a variety of areas. However, it has been demonstrated that these programs often do not meet the needs of the individuals being served (Gatz, Smyer, & Lawton, 1980). While immediate problems may be resolved through program intervention, particularly when a specific service is implemented, the older individual may not be prepared to deal independently with subsequent stresses. In addition, any significant change in later life
may result in multiple losses with the psychological grief reactions having a cumulative effect. The result is "bereavement overload" for many older persons (Kastenbaum, 1969).

Gerontological counseling and peer programs are well equipped to teach coping mechanisms to older persons who must deal with a major life transition or cumulative stresses. However, any effort to deduce the effectiveness of a counseled coping response must necessarily remain ambiguous because clinicians still do not have a clear idea of which coping mechanisms may portend healthy psychological adjustment. Furthermore, since the total effects of stress from one point in life may not appear fully evident until a later stage in the life span, the elderly may present the only suitable population of study in which the cumulative and long term effects of stress are accurately presented.

The focus of this study, however, is not stress per se, but the method of stress resolution, that is, the coping response. It is the contention of this investigation that in the process of defining different coping strategies, much can be learned about the relative effectiveness of these different mechanisms from survivors who have exhibited successful resolution of their earlier, profoundly stressful experiences.

Blocking out the relevant variables in the field of response to a stressful life situation can have two potent effects with respect to a study on aging. In the first instance a better understanding of effective coping strategies has a preventative component (literally teaching older persons how to deal with stress) and a treatment component (helping to determine effective intervention strategies for those who have not used adequate coping responses).

It is possible to meet the challenge of finding a way to help older people deal with the difficult and stressful conditions which are often part of the natural passage through later life. Counseling services can offer a response to
this challenge either indirectly through educational and service programs, or through direct therapeutic intervention. But a purely theoretical impetus to this response is not sufficient. Therapists need to know and must be able to impart viable information based on empirical evidence regarding the risks and rewards of selected actions.

**Definition of Terms**

**Stress.** "Stress is any event in which environmental or internal demands (or both) tax or exceed the adaptive resources of an individual, social system, or tissue system" (Lazarus & Launier, 1978, p. 296).

**Coping.** "Coping consists of those efforts, both action-oriented and intrapsychic, to manage (i.e., master, tolerate, reduce, minimize) environmental and internal demands, and conflicts among them, which tax or exceed a person's resources" (Lazarus & Launier, 1978, p. 311).

**Coping Style.** Coping style refers to the tendency of a person to respond in a stable, characteristic fashion. Using a modification of Pearlin and Schooler's (1978) classification scheme, coping styles in this study are defined as follows: (1) social resource responses, represented by the interaction with the interpersonal network and denoted by such acts as helping or being helped by others; (2) psychological resource responses, represented by characteristic defense operations such as denial; and (3) active coping responses, represented by outgoing behaviors, cognitions, and perceptions such as mastery of a task, optimistic faith and selective ignoring, respectively.

**Survivors.** In this study the term "survivors" is limited to those individuals who survived internment in a Nazi concentration camp.

**Concentration Camp.** The term "concentration camp" refers to any one of 13 prison centers officially classified by the Nazis as a concentration camp (Feig, 1979).
Adjustment. Adjustment is represented by the total score on the Life Satisfaction Index (Neugarten, Havighurst, & Tobin, 1961) as modified by Adams (1969) to the Life Satisfaction Index Z (LSIZ). This Index defines a well-adjusted person as one who lives a satisfactory life on a personal level which meets the expectations of society. Such an individual expresses "zest for life as opposed to apathy; resolution and fortitude as opposed to resignation; congruence between desired and achieved goals; high physical, psychological and social self-concept; and a happy, optimistic mood tone" (Adams, 1969, p. 470).

Elderly. Persons over 60 years of age are collectively referred to in this study as aged, elderly, or older persons (Health, Education & Welfare, 1977).
CHAPTER II
REVIEW OF THE LITERATURE

In reviewing studies specifically related to aging and mental health, a common theme emerges. The prospect of growing old while sustaining a sense of dignity and social worth is becoming increasingly more complex. Fiske (1980) and Butler (1975) have both noted that the maintenance of integrity in later years is possible only through mastery of a continuing series of crises which result from a condition of staggering and unprecedented social change.

It appears that the older person, with his diminished resources, is somewhat less able than his younger counterpart to survive personal and social change or upheaval (Lazarus, 1976b). Thus, stress and adaptation have become the framework of choice in assessing psychological health following the stressful events that confront the elderly (Fiske, 1980).

While the past decade has seen a proliferation of studies which examine the relationship between stress and health (e.g., Weiss, Dlin, Rollin, Fischer, & Bepler, 1957; Danowski, 1963; Treuting, 1962; Rahe, 1972), less attention has been given to the types of coping responses which may mediate this relationship.

Consequently, we know very little of the nature and substance of people's coping repertoires and even less of the relative effectiveness of the different responses. This chapter reviews the present state of stress theory and research in order to provide a model of investigation for analyzing coping responses. The formulation of specific coping mechanisms has then been developed through an
examination of the literature on stressful circumstances, including one extremely stressful situation, the Nazi Holocaust.

The Holocaust, represented in this study by internment in a Nazi concentration camp, provides a fertile and viable ground for research on stress and adaptation. The traumatic events faced by concentration camp internees, although assuredly more severe, are analogous to those facing the elderly. Thus, the Holocaust experience becomes a useful paradigm with universal implications for other groups, particularly the elderly. An investigation of how concentration camp internees coped with similar losses and stressful circumstances could provide a beneficial understanding of the adaptive responses necessary for meeting the crises of aging.

The effectiveness of any particular coping response or combination of responses has been considered within a framework of mental health with specific attention given to later adjustment. The premise here is that the choice of certain coping strategies may determine, to some extent, long-term adjustment.

This review of the literature opens with an exploration of the major, current theories of stress. First, the physical and physiological theories, and then the psychological (cognitive appraisal and life events) are summarized. This is followed by a discussion of the methodological limitations in stress research. The limitations of psychological studies using life events and laboratory research are explored. The problems with research in the naturalistic setting, with special emphasis on gerontological research, are also presented. The advantage of using the Holocaust as an example of stress and coping in a naturalistic setting is described, as well as the problems with previous Holocaust research. Those stressful circumstances in aging that parallel the traumatic and stressful events of the Holocaust are then discussed.
Finally, a separate section has been devoted to coping. First, coping is discussed from a broad, theoretical perspective. Then, the literature which has examined specific mechanisms is presented, with special attention given to the possible effectiveness of these different mechanisms, especially those of hope and denial.

Theories of Stress

For many years the research literature pertaining to stress has been proliferating, spurred by the recognition of a now well-documented link between stress and both physical and mental health (Chiriboga & Cutler, 1980; May & Sprague, 1976; Rahe, 1972; Renner & Birren, 1980). However, as the stress literature from different academic disciplines has increased, there has been a concomitant effort to define "stress" within the limited disciplinary parameters of the investigator (Eisdorfer & Wilkie, 1977; May & Sprague, 1976). From his detailed analysis of the then current usage of stress definitions, Haward (1960) found five common usages of the term. Stress was frequently defined as (1) a stimulus, (2) a response, (3) a combination of stimulus and response, (4) a total situation or dynamic matrix where the individual is the only variable, and (5) a class of conditions productive of disturbance within the individual.

While still in common usage today, these basic definitions may be further refined if presented within the framework of two alternative models of mental health: the closed- and open-systems. Within the closed-systems model, stress is viewed as a static entity occurring as either a (1) stimulus or (2) response. Within an open-systems model, health and disease are viewed as phases of life dependent on a genetic and/or environmentally determined balance where the organism is concerned with fulfilling needs and adapting to or mastering stresses. Health then represents the phase of successful adjustment and illness
the phase of failure (May & Sprague, 1976). In this model, stress is represented by (3) the interaction between stimulus and response.

The stress as a stimulus definition within the closed-systems model is well represented in the structural sciences as noted in engineering by any one of the theories which examines stress as a "load" factor in the environment. The second definition has received considerable attention through the work of Selye (1956) who postulated a "general adaptation syndrome" in response to a demanding environment. The third definition, from the open-systems model, considers stress as a reciprocal interaction between the environment (stimulus) and person (response). This interactional representation has perhaps been most thoroughly developed by Lazarus and his associates (see for instance, Lazarus & Launier, 1978). In order to ascertain the most useful criteria for a study of coping, each model and its concomitant definition(s) of stress must be examined for its virtues and limitations.

A Physical Model: Stress as a Stimulus. A stimulus based designation of stress asserts that there are certain characteristics in the environment which can be disruptive and detrimental to the system in some way. This is, as previously stated, an engineering model in which the "load" of stress is the determining factor in the response. That is, if the limits of the material are not exceeded, then removal of the stress would allow the material to return to its original state. However, if the limits of the material are exceeded, then permanent damage will result.

Stated as an analogy to the human system, the demands of the environment provoke a stress reaction within the individual. Given a limited strain, the human system may readily endure it without consequential damage. However, if the stress persists, or is great enough, permanent damage would accrue to the organism.
The stimulus-based definition is appealing, not only because of its simplicity, but because it is rooted in the unambiguous "facts" of a hard science. However, translating scientific "laws" to the human organism may not meet with success since very often different processes for measurement are necessary. In addition, the analogy to the human condition does not readily allow for the critical factor of subjective differences. Such differences may be apparent when one considers the difference among human beings in tolerating the same stress, or even the difference in tolerance for the same individual at different times (Coelho, Hamburg, & Adams, 1974). Even under the extreme conditions of an actual disaster, inspection of general patterns of mass behavior reveals individual reactions which are extremely varied (Lifton, 1964; Miller, Turner, & Kimball, 1981; Visotsky, Hamburg, Goss & Lebovits, 1961). Bettelheim (1943) wrote about stereotypical patterns of mass reactions to internment in a concentration camp. Yet, as a prisoner himself, he noted that the decision to observe and collect data was a very personal defense, individually developed, to protect his own personality from disintegration.

The importance of individual differences has also been reported in terms of the subjective meaning of the stimulus. Spielberger (1972) provided evidence that people with weak self-esteem were more vulnerable to ego-related threats as opposed to physical harm. Furthermore, a stimulus-based definition does not take into account the total absence of stress as a detrimental feature to all living systems (Kubzansky, 1961; Zubek, Pushkar, Sansom, & Gowing, 1961) or that a certain amount of stress may be necessary for normal human development. Sullivan (1953) considered anxiety as a crucial and often positive force in the individual's efforts to improve himself as, for example, when anxiety prompts the individual to excel beyond expectations. Finally, and most important from the perspective of this study, is the realization that a
stimulus-based definition does not incorporate the individual, psychological variables which may mediate the effects of stress. The latter point touches on the second definition of stress, which has been called response-based and is in seemingly exact opposition to a stimulus representation.

A Physiological Model: Stress as a Response. As its name would imply, the response based definition of stress treats the response as the stress. This particular view has received impetus primarily through the pioneering work of Selye who determined that "stress is the non-specific (physiological) response of the body to any demand made on it" (Selye, 1974, p. 14).

Briefly, Selye's model is composed of three components. First, the physiological response does not depend on the nature of the stressor. Second, the physiological reaction to stress is a common cluster of sequential symptoms which he termed the "general adaptation syndrome." This defense reaction progresses through three identifiable stages: (a) an alarm or emergency reaction, (b) attempted adaptation through a period of resistance and (c) exhaustion or death when the necessary resources of continued adaptation are depleted. Third, Selye postulated illness of "diseases of adaptation" which would be the result of excessive deployment of defenses against the exposure to the stressor agents. Although Selye moved away from his extreme generalist position by distinguishing between harmful and constructive stress "the body cannot make a distinction between good and bad stress" (Reese & Bright, 1982).

The critical point of the Selye model, and that which has generated the most controversy, is the emphasis on the non-specificity of the stress response. That is, he purports that the symptoms of this response constitute a definable pattern regardless of the specific nature of the illness. However Lacey (1967) found evidence that even if evoked, not all of the symptoms of the syndrome appear together. As further refutation, Mason (1971) found that some noxious
physical conditions, such as fasting and heat, do not produce the general adaptation syndrome. In fact, there is evidence of specificity, particularly in relation to catecholamine excretion. Such findings underscore the possibility that while many stressful situations may produce similar patterns of response, this is not true of all. Furthermore, a particular situation may evoke the prescribed pattern of change on one occasion but may not do so on another. The variability in physiological response weakens Selye's theory and also points out the omission of differences in individual response which may mediate the psychological state. As a result, other physiologists have expanded Selye's model to incorporate a transactional component.

Kagan and Levi (1971) have constructed their theoretical model to incorporate psychological factors which may mediate the onset or the course of physical diseases. Their premise is that psychological stimuli can and do cause physiological disorders. They focus on the non-specific aetiology as suggested by Selye, but they also propose that life changes evoke an effort at coping which mediates the physiological response. Their model includes not only the external influence, but takes into account the interaction of genetic factors and the influence of earlier environments. These three factors, the external, the genetic, and previous learning, comprise the stress response which in turn may produce precursors of disease and then disease itself. In other words, the particulars of the stress response may be promoted or counteracted by intervening variables. Compared to Selye's unidirectional model, Kagan and Levi describe a stress response within a cybernetic system with continuous feedback among all its components. Nevertheless, while this is a superbly crafted and highly complex model, it is still a purely response-based definition of stress where the emphasis is on the internal state of the individual rather than on the situation which may have induced it.
Each of the above noted models, and others like them which are response-based, suffer from a lack of generality. The acceptance of Selye's "general adaptation syndrome" has fallen from favor due to the lack of straightforward correlation between the various components of the response across individuals and situations. In fact, far from being a unified and unchanging pattern of stress response, there is a more variable relationship among the behavioral, physiological, and subjective areas which constitute the stress response. While Kagan and Levi have advanced Selye's model, it still assumes that any stimulus which produces the particular stress response must be viewed as a stressor. Accordingly, such a theory cannot explain why the same excessive noise should produce a degradation of performance in some individuals, enhancement in others, or even no discernable effect (Davis, 1968). The point is that we cannot sensibly consider stress only as the event per se and "it is equally irrational to suggest that the personality is the sole, or primary agent of the stress reaction" (Lazarus & Launier, 1978, p. 294).

While individuals generally have stable response characteristics, this does not preclude the fact that each person also reacts to difficult situations differently, with one reacting as if it were a threat, another as a challenge, and still others as if it were irrelevant (Lazarus & Launier, 1978). Thus, whether or not a particular experience is deemed stressful appears to depend on the integration of both external and internal forces. The natural evolution of both the response-based and stimulus-based approach would then appear to be an "interactional model of stress."

A Psychological Model: Stress as an Interaction. Fusion of the response-based and stimulus-based models appears to provide a more comprehensive account of stress. The inclusion of psychological processes within this fusion eliminates the essentially mechanical nature of those two approaches
and, furthermore, allows for individual differences. Such an approach, which has been rigorously developed by Lazarus and his associates, affords the individual an active role in the occurrence of stress. This model expresses the view that stress is the reciprocal interaction between external demands, constraints, or resources, and the internal resources to manage them. In the broadest sense Lazarus and Launier (1978) suggest that stress "is any event in which environmental or internal demands (or both) tax or exceed the adaptive resources of an individual, social system, or tissue system" (p. 296).

There are five generally recognizable stages within the interactional model of stress. The first stage considers the sources of demands on the individual. This arises from the environment (external demands) and within the individual as psychological or physiological needs (internal demands). The individual's perception of the demand and ability to cope with it form the second stage. The difference between the perceived demand and the individual's perception of his capability to meet this demand constitutes "stress." Thus, unlike the response-based or stimulus-based theories, stress in the interactional framework is dependent upon the individual's cognitive appraisal of both the demands and the resources capable of meeting those demands. The inclusion of cognitive appraisal provides consideration for a wide variety of organismic variables which may contribute to the differences among individual responses. The third stage represents the response to stress. The individual subjectively experiences stress with accompanying emotional, physiological and behavioral changes as an attempt is made to reduce the nature of the demand. These responses are regarded as methods of coping and their consequences represent the fourth stage in the model. The fifth and final stage is one of feedback. This occurs at all other stages in the stress system and is conducive to the shaping of outcome.
One of the most illustrative examples of feedback concerns the effectiveness of the coping response. Cox (1978) relates that ineffective coping may either prolong or increase the experience of stress and thereby induce consequential psychophysiological damage. The classic study by Brady, Porter, Conrad, and Mason (1958) of "executive monkeys" would appear to indicate that the responsibility for decision making was the main determinant for producing ulcers. However, later studies, while supporting the contention that stress can be a causal agent in ulceration, had quite different results as to which subject condition is more prone to this psychosomatic disorder. Weiss (1971) found that in a series of experiments with rats, the rat that could avoid shock by turning the wheel in response to a warning signal developed less ulceration than its yoked companion or yoked (no shock) control. The important difference is that in the Weiss experiment, the animal received immediate feedback to indicate that his response had been effective while the executive monkey had no immediate feedback to indicate that its response was successful until some time later when it received or failed to receive the shock. A vivid example from human science may be seen through the usage and popular acceptance of biofeedback techniques. Immediate feedback has been seen to influence even the autonomic nervous system such as heart rate and blood pressure, activities that traditionally are not assumed to be under voluntary control.

It is suggested that the five stage interactional model of stress provides a suitable theoretical framework for an adequate description of the coping operation. This model treats stress as an intervening variable, the reflection of a transaction between the person and his environment. It is a dynamic, cybernetic system which includes those individual differences in the coping response which could affect eventual outcome. Additionally, this model succeeds as a representative of interdisciplinary efforts to study stress (Fiske, 1980). For
example, in biological terms, stress may be seen to arise if the person's lifestyle differs too much from the kind of life in which his ancestors had evolved. In social terms, the person may experience stress if exposed to conflicting social pressures or is obliged to play inconsistent social roles. In phenomenological terms, stress may arise if the person's lifestyle fails to match his aspirations or ideals" (Cox, 1978, p. 21).

It is now appropriate to examine the research generated by this theoretical model in order to assess its validity in practical application.

Methodological Issues in Stress Research

This section has two purposes: first to elucidate general methodological problems in stress research. Second, using the methodological discussion as a guideline, the current and most prevalent research strategies will be reviewed to assess their potential viability for enhancing our knowledge of the coping process.

Methodological Problems in Studies of Stress. First, studies of stress often fail to consider individual differences in the perception of stress. Previously it was noted that the same situation may be perceived as a challenge to some, a threat to others, and in some cases, merely irrelevant (Lazarus & Launier, 1978). Intervening variables, such as the person's coping repertoire (which includes the personality dynamics of defense mechanisms) may intervene to affect the subjective meaning of the "stressful" situation (Janis, 1974; Lazarus, Averill & Opton, 1974).

Second, many studies fail to differentiate a temporal sequence. There are several facets regarding the temporal elements. One is the fact that stress may be sharply augmented if the event has not been predicted (Fiske, 1980). In a similar vein, but subtly different, Elder and Rockwell (1976) and Neugarten and Datan (1974) observed striking differences in response according to whether or
not the event was "on time." For example, the death of an aged individual may not have been predicted if the person was in apparent good health, but the timing of the event itself would certainly contrast sharply with the death of his substantially younger counterpart. Even an anticipated stress, however, may account for variation in the way people respond (Chiriboga, 1972; Lazarus, 1966; Lieberman, Prock, & Tobin, 1968).

Third, little attention has been given to the concurrent effects of a stressful event. In real life events do not occur in a vacuum. Rather, they may substantially affect a wide variety of peripheral circumstances, producing a cumulative effect that truly is "greater than the sum of its parts."

Fourth, the true effects of any stressful event, particularly one which severely impacted the individual, may not be apparent until months, or even years, later (Archibald & Tuddenham, 1965; Chodoff, 1963; Leopold & Dillon, 1963).

Fifth, there may be a failure to limit the generalizability of the stress measure. A number of studies have evaluated stress predicted on the assumption that the measure of one variable, such as the physiological response, is indicative of other organismic variables such as the coping activity. However, low intercorrelations have been found between such measures. For example, Bridges, Jones and Leak (1968) and Lacey (1967) found insignificant or only moderately significant correlations among autonomic nervous system responses.

Sixth, the failure to consider age parameters as a mediating variable is often present. Neugarten (1973) pointed out that particular events carry different meanings of stress according to the individual's age. For example, "losing one's mother may have a different meaning to a child than to an adolescent, or an adult, and at each age the individual will have different resources for coping with the loss" (Eisdorfer & Wilkie, 1977, p. 254). Age is
also critical in the assessment of coping as a performance variable. If not controlled age could, for example, confound the results of behavioral performance with advancing age, irrespective of the task.

Finally, stress research has often failed to recognize beneficial aspects of stress. The prevalent assumption is that a stressful event, particularly a series of such events, must invariably lead to disruptive states with a consequential impairment of performance. However, a number of studies (Broadbent, 1971; Broverman, Klaiber, Vogel & Kobayashi, 1974; Eisdorfer, 1968; Ellis, 1975) repeatedly affirm that a certain amount of stress is healthy and even helpful in performance.

The following section reviews the attempts to organize environmental stimuli along dimensions of quality and quantity of stress to at least control the stimulus variable in this stimulus-response interaction theory of stress.

Schedule of Recent Events. During the past decade and a half, stress research has been strongly influenced by Holmes and Rahe (1967). Their research instrument, the Schedule of Recent Events (also referred to as the Schedule of Recent Experience or SRE), became a prototype in stress measurement. This instrument was designed to ascertain the effects of certain major changes in the lives of many individuals. Essentially it consists of 42 events, each a psychometrically derived standardized weight to assess the degree of stress and time required for readjustment. This measure and the similar ones which followed it were the first standardized, systematic attempts to quantify the degree of stress experienced in life changes. Studies using the SRE have found a relationship between the number of stressful events in the person's life and that person's emotional and physical health (Holmes & Holmes, 1970; Masuda & Holmes, 1978; Rahe, 1969, 1974; Rahe & Arthur, 1977).
A number of weaknesses have emerged, however, since the inauguration of the SRE. Chief among these weaknesses is the inherent assumption that any of the listed changes (including positive toned events) are potentially damaging to health. Cousins (1976) offers a vivid example that such is not the case and, further, that positively toned events may even serve as emotional buffers against a stress disorder. In fact, negative stress has even been found to significantly correlate with improvement (Chiriboga & Cutler, 1980; Chiriboga & Dean, 1978). Unreliability with the SRE has also been a problem (Brown & Harris, 1978; Grant, Yager, Sweetwood & Olshen, 1982; Sarason, de Monchaux, & Hunt, 1975). In one study for example, there was relatively poor agreement between husbands and wives on the occurrence of life events (Yager, Grant, Sweetwood, & Gerst, 1981).

Perhaps the greatest controversy, however, has been generated by ignoring the critical factor of individual assessment (Chiriboga, 1977; Lazarus, 1980; Lowenthal & Chiriboga, 1973; Sarason, Johnson, & Siegel, 1978; Vinokur & Selzer, 1973). For example, while the death of a spouse carries the highest score, the actual amount of stress perceived by the widow or widower may vary widely according to such personal factors as the age at time of widowhood, the social supportive network available, and whether or not there was forewarning of the spouse's death (Balkwell, 1981). Content validity has been further questioned by Murphy and Brown (1980) who found that events involving long-term threats of moderate or marked magnitude distinguished younger women in whom depression and physical disease developed from those in whom they did not. Content validity has also been a significant problem when the SRE has been applied to special populations such as minority groups or the aged (Ander, Lindstrom, & Tibblin, 1974; Brown & Birley, 1968; Lowenthal & Chiriboga, 1973).
Predictive or concurrent validity also appears to be low with the SRE. Since most studies using this instrument have been cross-sectional or retrospective this factor has been difficult to assess. However, in the five published studies which could be located, four show that the total score (called the "life crises unit") on the SRE correlated at low or, at best, only at a modest level with subsequent symptoms (Grant, Yager, Sweetwood, & Olshen, 1982; Levine, Lee, McHugh, & Rahe, 1977; Myers, Lindenthal, & Pepper, 1974; Warheit, 1979). In addition, Gore (1973) and Hinkle (1974) found that many people who had previously undergone severe life changes did not develop illness. Fiske (1980) pointed out that people who have experienced many life stresses with a consequential "high" life crisis unit may be intrinsically different from those who have a lower score. That is, the number of life events which supposedly constitute stress may not reflect susceptibility to illness so much as the type of person who seeks out a challenging life style. Such people, Fiske notes, have "broader perspectives, on both themselves and society, than do the lightly stressed, and are more growth-oriented, insightful, and competent" (p. 355).

Another methodological weakness of the SRE stems from the time frame of the instrument since, as its name would imply, only those life events which fall into relatively recent life experience are considered (Horowitz & Wilner, 1980). In contrast, long term studies frequently have found that the impact of any particular life event may not be felt immediately; rather the true "weight" of the event may surface months, or even years, later (Archibald & Tuddenham, 1965; Chodoff, 1963; Leopold & Dillon, 1963).

Finally, and most important for this study, is the fact that the SRE does not give any information with respect to how the individual coped with the life
change event (McLean, 1977). Thus, the essential component of the response to stress is omitted.

While a number of other failings with the SRE have been noted (Brown, Sklair, Harris, & Birley, 1973; Dohrenwend & Dohrenwend, 1974; Sarason, 1974; Sarason, de Monchaux, & Hunt, 1975), it cannot be faulted as a noble attempt to quantify into manageable units the ambiguous concept of stress. However, to date the SRE and the many similar instruments which followed appear unable to grapple with the critical subjective factor of intervention, that is coping, which is salient to the understanding of stress management.

**Laboratory Analogues.** In contrast to the SRE type of research which focuses on the categorization of stimuli, the laboratory provides a controlled setting to examine how one might respond to an assumed stress. However, the price for this control may diminish the value of the findings. Due to concern for the welfare of the subjects, most laboratory situations of stress may be more of an annoyance than a threat. In addition, ethical experimenters always allow the subject to have final control over the stressful situation whereas in real life the person may not have a large degree of control. In some cases they may have none at all. In a similar vein, laboratory experiments are time bound which presents two additional limiting effects. First, in many real life encounters, part of the stress rests on the fact that the individual is uncertain as to when the encounter may end. Second, the totality of the effects from real life stress may not be revealed until years later (Dor-Shav, 1978).

The laboratory does not provide the necessary, descriptive information needed for new areas of investigation (e.g., coping) from which accurate classification can be derived. Generally such classifications, as in the SRE, are deduced rather than induced. Given the controlled setting of a laboratory, Lazarus and Launier (1978) state that "there is reason to doubt that valid rules
about stress and coping could be generated from such pale shadows of real-life stress" (p. 301).

Assessment devices, which appear to measure the response process, are included in this section because they mimic many of the same limitations found in the laboratory. The chief problem with such paper and pencil assessment is that the actual response may be quite different from the presumed response. Magnusson and Endler (1977) in reviewing a variety of assessment studies concluded that trait measures alone were often inadequate predictors of actual coping responses.

One area of personality study in psychology, "altruism," provides a rather vivid example of the foregoing. Schwartz (1970) found that most of his adult subjects stated that they would certainly give their bone marrow to a stranger in order to save a life. This contention remained firm even when subjects were warned that a donation would involve a general anesthetic, a day in the hospital, and soreness for several days thereafter. However, when the opportunity to give presented itself, the altruistic intentions were not enacted.

A parallel example which has become a classic study in the literature, while not directly a measure of the difference between responses on a paper and pencil test and subsequent action, still serves the point that intentions are not a good predictor of behavior. Darley and Batson (1973) asked students at the Princeton Theological Seminary to volunteer to give a lecture for a small fee. Half of the students were asked to speak on the Good Samaritan parable while the others were to speak on job opportunities for seminary graduates. Enroute to the speaking engagement each student had to pass a confederate slumped in the doorway, coughing and moaning. Most of the seminary students did not stop to aid the distressed man, and neither the topic on which they were to lecture nor the value they placed on religious commitment was associated with helping.
In fact, Darley and Batson noted that one seminary student "going to give his talk on the parable of the Good Samaritan literally stepped over the victim as he hurried on his way" (p. 107). Only the external factor of time seemed to affect the response of the student, with those believing they had to hurry less likely to help than those who believed they had enough time to stop and help.

While there are numerous laboratory and assessment studies which could be cited for their excellent investigative approach and creative design, it would appear that at best they can only approximate the natural situation and not supplant it. This discussion is not meant to negate those exceptional findings where laboratory results are, in fact, replicated in real life (e.g., Fenz & Epstein, 1967) but rather to point out that the ultimate value of the laboratory is the provision of precise data through the elimination or control of extraneous variables. What it cannot provide is a substitute for careful analysis of the true range of reactions to stress in real life. Lazarus and Launier (1978), who have researched stress extensively, underscore this conclusion:

At this stage of our knowledge the laboratory experiment seems not to be the ideal research strategy with which to study stress, coping, and their adaptational outcomes. We feel increasingly that these topics must be studied in the life setting where they occur (p. 300.)

The Naturalistic Paradigm

The obvious resolution to many of the problems in stress research, which were noted previously, would be to endorse the typical research strategy of sociologists and simply observe people, as they actually are, in their natural setting. However, the constraints of the "naturalistic" setting are many and almost as varied as the laboratory. For example, if one wishes to study the effects of a catastrophe, one must wait for it to happen. Attrition among subjects is also a greater problem, as is consent. Many people, who initially expose themselves to the eyes of a scientist eventually find this artificial
intrusion a hinderance to their right to privacy. Another problem is the need for an unobtrusive measure so that the response to simply being the object of a study, i.e., the "Hawthorne effect," is resolved in a way that does not contaminate the results. A more difficult problem has been the cost and personnel factor with a naturalistic study through time. Finally, given individual differences among people, an appropriate measure of coping necessitates an experience of stress which is sufficiently standardized as to permit accurate assessment of any variability among responses. However, this must be accomplished without the distortion from extraneous stressful factors which are usually inherent within any particular stressful situation. For that reason, the study of stress "in extremis" has appeared to be a viable subject of research interest since the greater the circumstances in degree of stress, the more likely will there be common consensus among the respondents as to their perception of the stress itself. In consequence, the greater the standardization in the perception of stress, the more accurate will be the assessment of the variance in the individual responses.

Two areas of stress research are noteworthy for their studies of stressful experience within a naturalistic setting: gerontological research and trauma studies. One type of traumatic event, the Holocaust, will be explored in detail, and although properly subsumed under the general classification of "trauma studies" its major implications for this study warrant it a separate placement within the general heading of "the naturalistic paradigm."

Gerontological Studies. In reviewing gerontological studies within the framework of stress and coping, it becomes apparent that they simply have not burgeoned in the literature with the same degree of impetus as stress research with other populations. Poon (1980) noted:

The general paucity of research on stress and the elderly is surprising, not only because of the well-documented
relation between stress and health among persons of all ages, but also because of the particular vulnerabilities of the elderly. For example, not only are the social, physical and economic losses associated with the aging process stresses in themselves, but they also constitute decrements in the resources available to the older person to cope with subsequent stresses" (p. 344.)

Thus Poon has pointed out that the theme of stress is not only a potent area of investigation for gerontological research, but also that it must be coupled with the complexities of the cumulative stresses which may be intensified for the aged because of their depleted resources.

Previously, it was mentioned that a particular event may have different meanings so that the perception of an event as stressful may vary according to its significance for each individual (Lazarus & Launier, 1978). Cognizant of the complexities of variables which interact in the evaluation of an event as stressful, gerontological research has tended to examine those major changes in life which may be expected as one moves through the later years. Perhaps as a result, gerontological interest in stress has generally not followed the mainstream of stress research which has relied primarily on life-events inventories and the laboratory analogue. Rather, studies of the aged have often focused on a specific condition within a naturalistic setting. In particular, important findings have resulted which enable us to better understand the transition into and through widowhood (Lopata, 1975), bereavement (Lindemann, 1944), retirement (Ryser & Sheldon, 1969), and the process of aging itself. While there is obvious value to these investigations, too narrow a focus on a single stress condition ignores the possibility that the stressor may be occurring within the context of other stresses. For example, the time of retirement may also include a loss in status, income, progressive impairment in health, loss of friends, family, and in many cases, relocation.
More recently, however, gerontological research on stress seems to have taken a step back. That is, studies within the gerontological setting today seem bogged down in defining "stress" (Chiriboga & Cutler, 1980; Miller, 1980). Nevertheless, such investigations have been pivotal in subsuming within the major lines of stress research the aged, a population which had previously been rather neglected or omitted altogether.

Another finding, or actually lack thereof, in reviewing the gerontological literature on stress, is the omission of studies on coping. This is significant in light of the fact that, as noted earlier by Poon (1980), the aged are particularly vulnerable. The extension of this recognition would be to pay specific attention to those resources which are available and of particular value to the older individual.

When one considers that health is an important aspect of successful aging and "that what people do or fail to do in dealing with their problems can make a difference to their well-being" (Pearlin & Schooler, 1978, p. 18) the selection and utilization of appropriate coping skills becomes extremely important. However, we are somewhat stymied because, as Poon (1980) points out: "research on coping, a subset of stress research, is at a very early stage of development" (p. 344). Thus, while gerontological research might benefit from studies with the more "popular" populations involved in stressful situations similar to those with which the elderly must grapple, there appears to be little consideration of the whole field of coping at this point. Yet, the results from the studies available to date are provocative and the findings, while somewhat sparse compared to general lines of inquiry using other populations, have emphasized the need to recognize the differential vulnerabilities of the older person. For example, in contrast to Janis (1958) who found the vigilant, problem-focused style to be most effective in post-surgical recovery, Cohen
(1980) found denial to be the most effective coping strategy in terms of successful outcome. However, Cohen considered coping from the aspect of "control" an inclusion which is of particular relevance when generalizing to the aged who may have fewer opportunities to exercise control over the losses they face. The point is that, especially for the elderly, all the relevant variables must be considered. As noted from the literature, salient variables for a study of coping in the aged should include abundant or depleted resources (Atchley, 1975; Botwinick, 1973), control or lack of control (Felton & Kahana, 1974; Lowenthal & Chiriboga, 1973; Nelson, 1974), anticipatory versus uncertainty or unexpectedness (Neugarten, 1970; Lowenthal & Chiriboga, 1973; Nelson, 1974), single versus concurrent or cumulative stresses, and "on time" versus "off schedule" events (Eisdorfer & Wilkie, 1977).

In each case it is the second contingency variable(s) which is of interest to gerontologists. While generally excluded from consideration in studies with younger populations, these variables are of particular importance to the older group because of their potential for adding to the stressful "weight" of any major life changing event and thus depleting further the already reduced resources of the elderly. Finally, superimposed on all the above variables is the knowledge that life is coming to an end. The philosophical argument of life's "meaning" becomes transposed into the ultimate acceptance: death (Lakin, 1982, Note 2). Thus, while management of a difficult change for the younger person may be aggravating, or invigorating, for the older person it may feel pointless. Decisions which would have been readily given during the middle-years now must be weighed against the advantages, if any, to accrue during the remaining years. A comprehensive assessment of coping for an older population, then, cannot fail to consider the impact of an impinging life conclusion. In this sense any research on coping which is intended as applicable to the aged should
afford us a reasonable domain in which to consider that most elusive form of control — coping functions which can only help us to endure that which we cannot change.

Drawing upon the conceptual value of open-systems theoretic, it would appear reasonable to try to incorporate the virtues within each of the current investigative models of stress which would preclude the limitations previously discussed. For example, a study of a situation which would commonly be assessed as stressful, in a natural setting, unlimited by time, and allowing for assessment of uncertainty, concurrent and cumulative stressors, as well as the other key variables noted above, would be an "ideal" experiment. Such a situation has been afforded by the annals of history and is known as the Holocaust.

The Holocaust. Contrary to popular opinion, there are few scientific studies of Holocaust survivors (Dor-Shav, 1978). The abundance of personal memoirs, fictional accounts, and observations of specific post-war medical conditions, have obscured this fact. The psychological studies which have been reported may be roughly categorized as having been derived from one of three areas: claims for restitution from the German government based on "psychological damage," the identification of a lingering "post traumatic stress disorder" in the victims, and more recently, the possibility of "second generation effects" wherein it is assumed that the problems of the parents have transferred to the child.

The profusion of available first-hand testimonies and case studies yields a rich supply of information waiting to be tapped and utilized. Studies which examine the Holocaust as an extreme example of stress are particularly suitable for scientific investigation since, as Benner et al. (1980) explain: "struggles drawn in bold relief and in extreme circumstances are easier to describe than
those of everyday living, which are more subtle and less obtrusive" (p. 221).

Unfortunately, the Holocaust experience is so overwhelming in its assault on the imaginational and rational boundaries that simplistic explanations have been sought and used to cover what is, essentially, a meaningless result. For example, much of the literature on the survivors emphasizes their "guilt." However, there is little, if any, justification for what is, in reality, only an interpretation. Since the issue of "guilt" in the survivor has captured much of the literature on the Holocaust, it is appropriate to pause here a moment and examine the subject more closely. Indeed many of the survivors have been heard to exclaim "Why did I survive?" Yet, is this a cry of guilty remorse as many have analyzed it to be? Given the tragic circumstances within which this statement is imbedded, is it not more responsible to hear this as a retort, a cry of unmitigated, perpetual mourning for all that has been lost? In order to understand exactly what has been lost, and prior to an investigation regarding any part of the Holocaust experience, a brief historical description is in order.

In 1933 Germany, the National Socialist German Workers' (NAZI) party swept into power. On January 30, 1933 the President, Col. von Hindenberg, appointed his defeated opponent, Adolf Hitler, Chancellor of the government. The following year, however, the President died and Hitler, proclaiming himself Chancellor and President of the Reich (realm), assumed leadership of a fragmented, economically bereft nation. The dispirited nation, still struggling to recover from the surrender terms of World War I, quickly found cohesion behind Hitler's strategy of the "common enemy." Anyone who was not fully supportive of the Nazi party was suspect.

Within months after Hitler came into power the first concentration camp (Dachau) was set into operation just outside of Munich. During the next several years a number of similar camps opened throughout Germany and opponents of
the Nazi party, which included intellectuals from all spheres, vanished mysteriously. Their crimes were summarily noted as "suspected treason against the State." The strength of the German army, the Wehrmacht, whose officers largely opposed Hitler, provided a safe refuge for its members against recriminations from the two internal but opposing forces of the Brown Shirts and the Nazis' private army, the Storm Troops. However, the strategic assassination of the head of the Brown Shirts brought the two internal units together as a more powerful force than the old guard army could establish. Thus, from 1938 the German government, as well as the military, was essentially controlled by the Nazi party.

From the inception of the war in 1939 Hitler intended to restore Germany to the dominate power in Europe. In his book, Mein Kampf (My Battle), written while in prison in 1923, he envisioned an army of slave laborers who would be recruited from the slavic nations. However, even more insidious was his plan for completely eliminating the Jewish "race" from Europe, together with other "undesirables." Jehovah's Witnesses, Seventh Day Adventists, blacks, certain gypsy tribes, homosexuals, political opponents, selected members of the Christian clergy, communists, socialists, trade union workers, and the mentally or physically infirm were among those slated for destruction. In sum, this was a plan to develop a "Master Race" which would rule all of Europe from a seat in Germany for a thousand years.

There were only four possible alternatives for Hitler's "undesirables": escape, hiding, induction into a concentration camp, or summary execution. Due to the extraordinary rapidity of the German war advance, escape was virtually impossible. Hiding was an option available to few since false papers had to be procured at great risk and discovery was always imminent. While shooting by the Einsatzgruppen (mobile killing units) and carbon monoxide poisoning were
the general modes of execution during the early years of the war, it soon became apparent that these methods were an inefficient and ineffective long-term "solution." Other complications included the need for slave labor to help the German war effort and massive facilities to hold prisoners.

As a result a vast network of prison camps was established, based on every conceivable rationale for a prison. They ranged from exclusive extermination centers to resettlement complexes, from penal colonies to POW prisons, from forced labor camps to transit camps and holding centers. Some historians have also included the carefully guarded and controlled ghettos within the scope of the concentration camp system (Feig, 1979).

While the camps which spread throughout western and eastern Europe could be counted in the thousands, the Nazis classified only 19 in their official categorization as "primary centers." "Almost all of the remaining thousands [of camps] were attached to, allied with, or under the supervision of the Big Ninteen" (Feig, 1979, p. 26). These classifications were as follows:

Class I - The Four Killing Centers (Belzec, Chelmno, Sobibor, Treblinka); Class II - The Official Concentration Camps (Auschwitz/Birkenau, Buchenwald, Dachau, Dora/Nordhausen, Flossenburg, Gross-Rosen, Majdanek, Mauthausen, Natzweiler, Neuengamme, Ravensbruck, Sachsenhausen, Stutthof); Class III - Holding Center (Bergen-Belsen) and Class IV - Transit Center/"Model Camp" (Theresienstadt ghetto)

The Class I - killing centers were reserved almost exclusively for Jews. Hitler could feel assured that the annihilation of the Jews would not cause consternation in a world which was, with few exceptions, at best indifferent and at worst intolerant of this group of people. However, in order to prevent any humanistic outcry, all the death camps were placed in Poland, traditionally an overtly, highly anti-Semitic country. The other types of camps generally held,
in addition to Jews, large contingents of prisoners of war, criminals transferred from German prisons, political opponents, and others who, as mentioned, did not fit the Nazi "ideal."

By the end of the war, 35 million people had been killed. The greatest toll was in Russia with a loss of 12 million and in the Nazi concentration camps where at least 11 million were murdered. While many of the people taken to the camps were incarcerated either as individuals (such as a prisoner of war) or members of small groups (such as certain tribes of gypsies), all Jews were hunted down. The effort to annihilate the Jewish people, referred to by the Nazis as the "final solution" has been well documented elsewhere (Hilberg, 1961, 1971; Levin, 1968; Reitlinger, 1968). The chances for survival in a concentration camp were so small — only 1 in 600 survived — (Benner et al., 1983; Hocking, 1970) that as soon as a Jewish family was taken away to a camp, neighbors generally confiscated all their possessions. Thus, whole Jewish communities were obliterated and their culture, developed over hundreds of years, was in many areas completely erased. As a result the few Jewish survivors had, upon their release, not only no family and friends, but no place to which they could return.

Many of the survivors immigrated to the United States and began to resurrect their lives. Unfortunately, there were few studies that attempted an understanding of the despicable phenomenon they had endured. It is a sad commentary, but also a sociological axiom, that people must attempt to shield that which cannot be understood behind a cloak of rationalization. As a result, after hearing of the calamitous experiences of the survivor, many people reacted with disbelief. As if this were not enough for the tormented survivor, disbelief soon disintegrated into blame. The prevalent assumption was that if these people had suffered this much, they must somehow have deserved it! Given this reason it is not surprising that survivors of the Nazi Holocaust would
not, or could not, discuss their experiences. Other survivors chose not to speak of their experiences perhaps because as Benner et al. (1980) concluded: "silence [was] the most telling way of acknowledging the horror that occurred" (p. 220).

Recently however, and perhaps with the onset of age and concerned about the possibility that this odious chapter in history may be forever closed and forgotten, a number of survivors have insisted on talking. From some of them we have learned a great deal about a psychological disorder which may not surface until some years later (Chodoff, 1963; Tas, 1951) referred to variously as the "survivor syndrome" (Niederland, 1972), the "concentration camp syndrome" (Chodoff, 1970; de Wind, 1972), or the "delayed stress syndrome." An earlier revelation of this finding might have helped many thousands of Viet Nam veterans whose normal post-war readjustment seemed to disintegrate "for no reason" many years later (Segal, 1974).

There are many areas of the Holocaust which lend themselves to studies yielding insightful understanding of the psychological processes at work in the face of extreme stress. To name just a few, subjects of study might include deportation, overcrowding in the ghettos, resistance, dehumanization (Bernard, Ottenberg & Redl, 1977) and, of course, the concentration camp.

Although classified by the Nazis as substantially different in terms of hardship, many concentration camps were often very much alike in practice. They were often indistinguishable even as to differences in such basic necessities as sanitation facilities and food allotments. The Nazi concentration camp has been used in this study as the common stress against which psychological responses may be measured and differentiated. In this study, however, the term "concentration camp" is limited to the Class II camps so classified by the Nazis. The killing centers, transit camps, holding centers, or those prisons not classified by the Nazis as official concentration camps (Feig,
1979) were not included in this study because many of them were significantly different (Chodoff, 1976). Most notable in difference, for example, was the fact that the killing centers functioned strictly for the sole purpose of extermination. There was no chance to work or use any other means to continue life, however brief or torturous that life might be. A sober statistic makes this point more compelling than words can convey. At the killing center Belzec, where it is estimated that of the 600,000 prisoners who entered, "only one person is known to have survived" (Feig, 1979, p. 276). The killing centers, however, did share one austere commonality with most of the concentration camps — the gas chambers. Looming over every moment of life in the concentration camps, as in the killing centers, was the ominous spectre of the gas chamber. The main difference between the killing centers and the concentration camps was the expediency of death. As Feig reports in her analysis of the camps, death in the killing centers was immediate — in the concentration camps "they died slowly, piece by piece" (Feig, p. 31).

But what was a Nazi concentration camp like? Literally hundreds of memoirs from both survivors and liberators repeat identical circumstances. A few moments from the testimony of Eda Lichtman (1980), a survivor from the Sobibor death camp, is illustrative:

Sobibor

Officers and soldiers with machine guns were waiting for us. One of them held a big dog on a leash. An officer called to me, "You, there, what is your profession?" I replied, "Kindergarten teacher." The Nazi roared with laughter. "Well, here you will wash our laundry." I left the ranks with two young women . . . and we were led into the camp to a little barrack. Some clothing was lying around, proof that other people had been there before. What had happened to them? Out of 7,000 people who left Hrubieszow, only three women remained alive in Sobibor. Of these three, I am the only survivor.

Everyday Life in Sobibor

. . . I remember that first night. I heard screams, and opened the door, but received lashes of a whip across my
face ... Later I learned that these screams came from young girls who were raped before being gassed.

From our barrack, I could hear people begging for water. From time to time, a prisoner was allowed to go to the well where the Volksdeutsch Michel was waiting. With his bayonet, he pushed the wretched victim to the latrines. "Gather your excrement with your bare hands!" he screamed. The he led the prisoner to the guard, Malinowski, who shot him ...

I also remember two prisoners carrying a stretcher with a young woman in labor. After a few minutes, we heard the wailing of a new-born child. SS Wagner was present, and ordered the Ukrainian guard to throw the baby into the latrines. The mother was taken to camp No. 3. Some days later the body of the new-born was floating in the ditch, amidst the excrement.

Another time, in a convoy from Vienna, the SS selected three beautiful singers, who were forced to perform until the Nazis became tired. Then the girls were executed (pp. 54-56.)

The Nazi concentration camps were centers of mass torture and mass execution and the extent of the atrocities and brutalities committed against helpless inmates horrified the Allies who liberated the camps in 1945.

According to a conservative estimate, more than 4,000,000 men, women and children in the Auschwitz camp alone were put to death by such methods as torture, starvation, shooting, and gas poisoning. At Auschwitz and the other camps the liberating armies found abundant evidence of mass executions and famine. Most of the concentration camps were equipped with crematories for the disposal of bodies. At Buchenwald, where some of the German personnel made a hobby of collecting and tanning human skin for book covers and lamp shades, the crematory had a capacity of 400 bodies daily. At many camps, most notably, Belsen, scientists conducted monstrous experiments, using inmates as human guinea pigs. (Bram, Dickey, & Phillips, 1979, p. 380).

While the Nazi concentration camps, as defined in this study, were in effect not substantially different in basic conditions (Kogon, 1980), there was a great difference in the treatment that was accorded to the various types of prisoners. Unfortunately, many studies do not separate out this critical variable. For example, Boder's 1949 study is typical in that he interviewed survivors of all creeds and nationalities. Then, based on a final composite of just eight
testimonies he proposed that a substantial change in personality pre- and post-Holocaust had occurred. Boder might even have been correct, but his methodology suffers from overlooking the very substance of the Nazi directives. The survivors, like the prisoners, were most definitely not a homogeneous group.

The Germans carefully classified their prisoners among four major groups: political opponents, members of "inferior races," criminals, and "asocials." These groups were further sub-divided and while there was not a single camp with but one category (Kogon, 1980), the Jews (as members of the "inferior races") unquestionably received the worst treatment. The only other group to even approach the Jews in both a proportionate loss of their numbers and continuously ghastly conditions were the homosexuals. Other variables which are crucial to defining the conditions of the survivors include the specific details of their experiences. These differences could range from internment to hiding to escape. Although survivors of Nazi persecution were exposed to extremely different types of experiences which could interact to affect the underlying premise and subsequent results of any investigation (Klein, Zellermayer, & Shanan, 1963), few studies have sought to either sort out, control, or compare and contrast these differences. Rather, many Holocaust studies have grouped together, inclusively, survivors with a variety of differences in experiences (e.g., Hocking, 1970). Again, the point is that in addition to the obvious factors such as the survivor's own individual make-up, pre- and post-Holocaust development, the particulars of their own Holocaust experience create an extremely heterogeneous group which defies any constrictive label.

Beyond the fault of subsuming all Holocaust survivors as a homogeneous population, two other observations from a review of the Holocaust literature also stand out and merit critical discussion.
First, as noted previously, with respect to survivors per se (versus studies of their families or specifically their children), most of the scholarly work has centered around cases seen in psychiatric treatment. The results of these analyses would appear to indicate that all survivors, and emphatically those from the concentration camps, suffer from a psychiatric disorder which Niederland (1961) coined the "survivor syndrome." The syndrome includes symptoms such as anxiety, depression, guilt, paranoia, psychosomatic disorders, disturbances in cognition as well as occupational and personal maladjustment (Antonovsky, Maoz, Dowty, & Wijzenbeek, 1971; Chodoff, 1963, 1970; Eitinger, 1980; Krystal & Niederland, 1968; Matussek, 1975; Nathan, Eitinger, & Winnik, 1964). The characterologic system which encompasses the syndrome is a regression to infantile structures (de Wind, 1972) and identification with the aggressor (Berger, 1977). The latter notion was first popularized in the literature by Bettelheim (1943) who "unwittingly lay the blame on survivors and thus started a trend known as the 'guilt of the survivors.' This trend preoccupies the psychoanalytic literature to this day" (Fogelman, Note 3).

Bettelheim's theory was evocative and supported by the tragic circumstances in which it was developed. Indeed he was a concentration camp prisoner himself. But his internment pre-dated 1933 and the establishment of the death camps. "Based on his work with autistic children, and from a framework of the psychoanalytic model of sexual development, he purported that survivors coped in the concentration camp by regressing into infantile behavior and identification with the aggressor" (Fogelman, Note 3).

There has been, until recently, little empirical research to refute the assumption that all survivors suffer (to one degree or another) from the "survivor syndrome." In fact, until recently, the bulk of the evidence which has been gleaned from psychiatrists and psychologists who work with survivors
would appear to substantiate this premise. However, upon closer examination at least three factors belie our acceptance of these studies as proof of the pathology of the survivor.

In the first instance, most of the survivors saw a psychiatrist for the very purpose of demonstrating pathological consequences from the psychological as well as physical injuries sustained during the Holocaust (Eissler, 1967). Given the ulterior objective, that survivors who presented themselves for treatment were seeking restitution claims from the German government, any results from such studies would be biased in the extreme. To further demonstrate the improbability of any objective consideration of the state of mental health of the survivors, Eissler found that, by and large, the survivors' claims were rejected! The psychiatrists refused to acknowledge a connection between the victims' experiences and later mental illness. Using this argument, and citing the "findings" of the restitution psychiatrists, one might even argue that contrary to all survivors suffering from a "survivor syndrome" indeed few, if any, have suffered any psychological damage from the experience at all. One can readily see that such a stance is ludicrous, yet many persist in their belief that the mental state of the survivors must lie at one extreme or the other.

Returning to the research which supports the contention that the survivors are all maladjusted, and in contrast to survivors seeking reparations, the remainder of the scientific literature of Holocaust survivors is predominately psychiatric and psychoanalytic and relies heavily on clinical studies (Hoppe, 1971; Weinfield, Sigal & Eaton, 1981). In addition to the obvious fact that such a group may not be representative of the population at large, Kestenberg (1972) found that most therapists deny the frightening impact of the Nazi persecution to the point of clearly resisting any avenues of exploration in this area. While Kestenberg drew this conclusion on the basis of a survey of analysts working
with children of survivors, it may be, given the proximity of the event, even more true for therapists working with the survivors themselves. In any event, Des Pres (1977) found that many survivors who were interviewed intensively by mental health professionals were treated as if they were very disturbed or, at best, very strange. Today there is an understanding among Holocaust scholars that mental health practitioners tend to either deny or overreact to the survivor in either the mode just illustrated by Des Pres, or through over-identification (Klein & Fogelman, in press; Fogelman & Savran, 1980).

Third, as Landsman (Note 1) has pointed out, "The superbly happy person, the productive and delighted person, rarely finds his way into the psychologist's office. The intimacy of these data have been denied by the psychologist."

This is not to say the "survivor syndrome" does not exist, or even that survivors have not been adversely affected by the harrowing experience of the Holocaust. Rather, this discussion emphasizes that the Holocaust is so mysterious and so enigmatic that there has been a tendency to "read in" multiple layers of meaning. The only significant sound from the literature has been the tendency to report the appalling statistics, which negate any understanding of the individual survivor. "To be truly objective and honest in appraisal, one must keep ever in mind the personal statement of the individual — not as a Holocaust victim, but as a human being whose autobiographical make-up includes a very particular trauma" (Fogelman, Note 3).

In reporting their results which did not support the "survivor syndrome" findings of previous studies, Weinfield et al. (1981) concluded:

It should be clear that our findings in no way diminish the immense magnitude of the horrors suffered by ... survivors, nor do they deny the reality of severe, on-going mental and physiological consequences. Rather they focus attention on the magnificent ability of human beings to rebuild shattered lives, careers, and families, even as they wrestle with the bitterest of memories. Such an emphasis may provide a useful corrective to popular, clinically
derived impressions of survivors... prevalent in parts of
the therapeutic communities, as suffering from
incapacitating or harmful neuroses, or worse. Research
might shift to the study of the adaptive or rehabilitative
processes at work. (p. 14.)

With the above summary by Weinfield et al. in mind, the Holocaust offers a
vital, present-day dimension. While some might argue whether or not the
Holocaust was a historical "accident" free from precedent, few would take
exception to the proposition that the Holocaust carries universal implications.
Again, citing the Holocaust as a very particular type of trauma, analogies may
be drawn to other vulnerable groups through which promising connections for
beneficial improvement may emerge. Yet, there have been few scholastic
investigations in this regard. While earlier it was noted that many of the
survivors had chosen to remain silent during the post-World War II years, it
should now be emphasized that with few exceptions, so too have been the
potential investigators. However, Benner et al. (1980) caution: "Our own silence,
even if motivated purely by respect, would place the camps and those who
inhabited them outside the realm of human existence. It would allow for the
possibility that there are no connecting threads between what happened in the
camps and what people experience -- both as victims and as oppressors -- in
more ordinary circumstances" (p. 220). And Yehuda Bauer (1977), one of the
world's foremost authorities on the Holocaust expresses his concern for further
investigation: "Why do we not explore the psychology of people in extreme
situations who are totally bereft of hope? Perhaps there one may find a clue
to our bewilderment over behavior at the edge of the pit or at the entrance of
the gas chambers; perhaps it will be discovered that there are human defense
mechanisms which dull the senses and prevent excessive suffering in situations
from which there is no escape" (p. 32).
The purpose of this study is to attempt to delineate the specific coping responses used by survivors to confront the extreme adversity of internment in a Nazi concentration camp. By ascertaining the benefits of different mechanisms or styles of coping it has been proposed that such an understanding may benefit other groups who confront similar, albeit less extreme, circumstances. One such group is the elderly and a comparison of possible parallel conditions between concentration camp internees and the aged is now in order.  

Concentration Camp Internees and the Aged: Similarities in Life Stress

Fiske (1980), in exploring the tasks, problems, and crises of middle and later life, said: "While there are individuals who clearly attain higher forms of wisdom, more effective means of coping and adaptation, and ergo a more fulfilling life as they grow older, it is not necessarily the prevailing pattern" (p. 340). And Janis (1971) comments, somewhat more forcefully, "many aged persons are in a stressful situation comparable to that of infantrymen in combat, as they battle the infirmities, restrictions, and other harassments of old age" (p. 184).

One would be remiss, and create the same kind of erroneous stereotype of the Holocaust survivor, if it were not quickly mentioned that many, indeed perhaps the great majority of the aged, particularly if they are in good physical health, can successfully cope with most stressful situations that occur in life (Eisdorfer & Wilkie, 1977, p. 277). However, the difficulties and psychic costs from the stresses of the later years have been well documented, and it is for those individuals who are not effective in dealing with the manifold stresses from the changes they encounter that this study is directed. Further, it is proposed that an understanding of the losses incurred as one gets older may support a preventive stance in easing the way for those who shall follow.
While at first glance, the extent of the detrimental circumstances faced by
the concentration camp internee defy even a superficial comparison with the
conditions faced by many of the elderly, it should be noted that it is not the
specific details of the experience which warrant investigation so much as the
extent of the trauma any detrimental experience can evoke. Indeed, Hamburg
and Adams (1967) commented: "Many common experiences can be traumatic. A
variety of situations have been emphasized in recent years as threatening,
difficult experiences for many individuals. Some of these are inherent
components of the life cycle" (p. 277.)

The conditions which many elderly confront are, in some cases, similar to
those to which the Holocaust survivors were subjected. For example, loss of job,
discrimination as a minority group, separation from friends and family, loss of
status, ostracism, loss of income, and threat to life and self-esteem.

In a study of ego psychology in the aged, Cath (1966) described a state
beyond depression, the depleted state. Grauer (1969), drawing upon Cath's work
with the aged, noted that there was vivid agreement between the depleted state
described by Cath and the depleted ego of the survivor. In addition to the
aspect of ego exhaustion, Grauer, after evaluating close to one thousand cases
of survivors, found similarities between them and the aged. For example, both
groups experienced loss of one's family, an associated loss of status, of material
possessions, and of earning capacity. Factors such as severe humiliation,
depersonalization, uprooting, a break with past traditions and relocation were
also evident in both the ego exhausted older person and the concentration camp
survivor. "Ego exhaustion seen here," Grauer states, "is similar to that
encountered in aging. In the aged continued losses and anatomical and
physiological decline prevents reparation" (p. 621).
Lazarus (1976b) has stated, "the very act of living inevitably entails difficulties and perhaps tragedy that no one can escape" (p. 14). The problem for the elderly is not that they may expect, given their extending years, to incur more difficulties, rather that they must do so with diminished resources and physical capacities. Consequently, the ability to deal with loss, particularly complex loss, becomes an increasingly threatening prospect.

Warnes (1972), in elucidating the clinical picture of the survivor syndrome and the common denominators of such experiences, stressed that cumulative losses often evoke utter helplessness and/or hopelessness to the traumatic situation and provoke, in turn, automatic anxiety.

Perhaps there is no other group of persons than the Holocaust survivors who have managed to cope with overwhelming threat and share the specifics of loss, particularly that of close relatives, which can demonstrate as well the psychodynamic mechanisms necessary to transcend such experiences. Before examining, in detail, these mechanisms, a brief synopsis of the decrements under consideration may be helpful.

Shock (1962) has shown that aging is associated with a reduction in reserve capacities. This increases the probability that environmental stress may strain the individual's capacity and result in death. Sherman (1976) also found that as one ages there is a corresponding decrement of function and "He must face up to new circumstances such as retirement, reduced income, bereavement, loss of status ... later years take away job, spouse, friends and tolerant milieu ... anxiety, too, accompanies psychological ageing. Some people are apprehensive about their jobs, their social position or diminished sexual attractiveness. Others ... fear pain, mutilation and death" (p. 415).

It is important to realize that, especially for the older individual, most major changes involve losses of the familiar and predictable (Fiske, 1980).
Earlier it was noted that much of the research on stress has failed to take into account such critical variables as the spiraling effects of other losses as the result of one loss, whether an event was "on schedule" or unanticipated, and so forth. In gerontological research, these problems are no less evident. In his preface to studies on aging, Poon (1980) cautioned: "Those who focus on single-stress conditions have in the past tended to ignore the possibility that the focal stressor may be occurring in the context of other stresses . . ." (p. 343). Scrutiny of a so-called single stress event, widowhood, is illustrative.

Becoming widowed is rapidly increasing in dramatic proportion to the population. For example, in 1960 there were 9 million widowed persons in this country; this number increased to 12 million by 1975 (Balkwell, 1981). Being independent and being alone are, of course, two very different things. Unlike past generations of extended families, today's widows and widowers, indeed all persons over the age of 65, even if relatively incapacitated, are more likely to live alone than in any other type of household (Stenhouwer, 1968; Streib, 1970).

Economically, the aged in this country, particularly those on a fixed income, are in the poorest category. Examining the income for widows Lopata (1978) found that one-half lived on or below the income adequacy level determined by the Social Security Administration. Furthermore, Balkwell (1981) noted: "A proportionate decrease in present income relative to previous economic level (i.e., relative deprivation) may have as great an impact on some widows as actual poverty does on others" (p. 118). The "proportionate decrease" is great. In a sample studied by Lewis and Berns (1975), an average reduction of 44% from previous income levels occurred in the first two years of widowhood.

The widowed also have typically higher death rates than their married counterparts (Berardo, 1968). It is particularly noteworthy that the differences
in mortality rates were greatest for those causes of death for which psychological states may influence life chances.

"Widowed" tends to be a role without norms or prescription for behavior (Arling, 1976; Hiltz, 1978; Lopata, 1975) and anomie, a condition associated with the absence of social norms to guide behavior, has long been associated with suicide (Durkheim, 1951). Thus it is not unexpected to find that suicide rates are higher among the widowed than their married counterparts (Balkwell, 1981).

There has also been found a dramatic and for some, a surprising, gender difference in the reaction to widowhood. Fiske (1980) noted: "It was among men that the most traumatic, often very long-lasting reactions to loss of a spouse developed" (p. 352). Mental illness is also elevated among widowed men (Gove, 1972) with depression being the chief complaint. Possibly the greatest protection against depression, involvement in strong social and organizational ties, is increasingly denied as one gets older. Obviously, as one ages, there is a concomitant loss of friends through death. Most widows and some widowers complain that the loss of spouse also seemed to automatically close previous social avenues enjoyed with other couples.

Given the prevalent stereotype that the aged are a "group of people who, on a fixed calendar basis, cease to be people and become unintelligent, asexual, unemployable and crazy" ("Living Longer," 1981, p. 63) the prospect of organizational involvement is low. For the widowed, where organizational employment may be crucial to augmenting a diminished income, the low-level job prospects, younger and often more educated competition, and the "lip service" which denies any age discrimination yet obviously practices it, may all be humiliating.

In relating all this to the experiences of the Holocaust survivors, one can find some remarkable parallels. Even prior to imprisonment few Holocaust
victims were able to work or earn enough to maintain a sufficient standard of living. Regardless of the "role" each victim tried to play in following Nazi stratagems, they usually guessed wrong. The Nazis kept their victims off target by promising appropriate changes which, more often than not, led the believer to uncertain terror and ultimately, death. The victims were stereotyped, cut-off, harassed, or their plight pitiously ignored. The events were unanticipated, and for every human being, "off schedule."

Persons subjected to the Holocaust generally lost their spouse and indeed their entire personal network. Those who experienced the loss of a spouse in the Holocaust often described the stages they moved through very much as Lindemann first proposed in 1944, although he had not based his observations on Holocaust survivors.

In discussing personal grief as a parallel experience, it is difficult to detect if a Holocaust survivor or a widowed American stated the following:

I am convinced that if I had known the facts ... before I had to experience them, it would not have made my grief less intense, not lessened my misery, minimized my loss or quieted my anger. No, none of these things. But it would have allowed me hope. It would have given me courage. I would have known that ... I would be joyful again. Not my old self, I am another woman now. (Caine, 1974, p. 92).

Beyond the external variables which may not be within the control of the individual, the internal choice of response may drastically affect how the widow or widower ultimately responds. Parkes, Benjamin and Fitzgerald (1969) found an excess over expected age-specific mortality rates during the first six months of bereavement. Where the external factor of time has not been sufficient to deploy some of the stress from that transition, the issue of coping may effect survival itself. This contention has found support when generalized to other areas besides widowhood. For example, in discussing effective coping, Benner et al. (1980) stated that "the movement of aged persons from one institution to
another constitutes a life threatening situation in that it is usually followed by a sharp rise in mortality rates" (p. 229). Aldrich and Mendkoff (1963) reported that this increased rate of death was not uniform but varied according to the types of coping which the individual used to deal with the move.

To underscore the generalizability of coping, two additional points are noteworthy. Marris (1975), in discussing intriguing similarities across cultures, reported consistent ways of effectively coping with a variety of person and social changes. Second, Bandura (1977a, 1977b), Benner et al. (1980), and Meichenbaum (1977), among others, have repeatedly found that the way an individual copes with stress is highly indicative of how he or she will manage subsequent stresses. "The individual who successfully copes with one stressful experience will increase his or her capacity to manage subsequent ones" (Benner et al., 1980, p. 242) is a premise which increasingly is being articulated in treatment and prevention. Accordingly, the emphasis in research has shifted from the conditions of intense psychological stress to the study of the psychological mechanisms that interact to affect the potential impact of stress.

Coping

This section marks a transition from an emphasis on the nature of stress to the ways in which people handle stress, that is, the coping response. "Research on coping, a subset of stress research, is at a very early stage of development" (Poon, 1980, p. 344). Perhaps because coping per se has not often been isolated for purposeful investigation, it has acquired a variety of conceptual meanings being used interchangeably with mastery, defense, and adaptation (White, 1976). Thus it is necessary to specify both the broad dimensions of "coping" as well as its more concrete aspects.
These issues will be dealt with first by exploring the various working definitions of coping expressed in the literature. Second as the concept of coping implies an examination of the individual's struggle to deal with adversity (Hamburg & Adams, 1967), the trauma literature will be explored for information on coping. The related literature will also be perused and one particularly traumatic situation, survival in a Nazi concentration camp, will be explored in depth for pertinent clues as to how the internees sustained themselves throughout this experience. In citing the array of coping mechanisms which have been identified, the relative effectiveness of different ways of coping will also be reviewed with particular emphasis given to the conflicting findings regarding denial.

Broad Dimensions of Coping. "Coping focuses on both the external and internal operations of the organism that maximizes its options. It not only incorporates the function of defense mechanisms but includes a broader range of actions that the person can use to help vitiate the impact of stress. Coping encompasses individual flexibility, habits of information gathering, and a variety of defense mechanisms" (Dimsdale, 1978, p. 402-413).

Much of the research on coping has been divided according to either psychological dispositions or specific responses to situational conditions. According to the personality perspective, people develop certain styles of dealing with stress which transcend situational boundaries. In contrast, recent investigators (e.g., Pearlin & Schooler, 1978) have underscored specificity. In terms of examining which approach is more effective, the distinction becomes blurred. This is especially true if one focuses on the responses per se because one is then in a position to examine the relative contribution of any one coping mechanism regardless of the methodological approach. Nevertheless, since the number of coping responses can conceivably vary widely, several investigators
have sought to manage the broad dimensions of coping within the manageable units of an overall classification scheme, which intrinsically provides the dual function of systematic inquiry through a workable definition.

One of the earliest investigator's to attempt a classification of coping was Menninger in 1954. Keeping in mind that analytic theory was still the predominant mode of inquiry at this time, Menninger offered a classification of coping processes based upon the concept that the ego is a homeostatic regulator. He purported that the ego deployed coping techniques in an effort to maintain psychic equilibrium. Menninger attempted to classify coping along a hierarchy of five differentiated though often overlapping groups. At the low end of the hierarchy were those coping responses which were designed for temporary emergencies such as increased alertness or vigilance. At the upper end of the hierarchy were those responses which may reach the point of violent loss of control or death.

As one of the first published papers to cite the importance of coping, Menninger's work suffers from certain pioneering limitations. For example, the important possibility that certain styles of coping may be both healthy and successful, while mentioned, are never described. Essentially Menninger's work focuses on "failures" of coping. The degree of threat is also not clarified and one is left to wonder then about the amount of stress which is under consideration and whether or not it is the same or even similar for all persons involved. The point is that if the situation is left ambiguous, as Menninger has done, one cannot determine with confidence whether or not the coping response is being assessed independently of the threat or, to put it another way, if the variance in response among individuals has been standardized against the same perceived stress.
In spite of the foregoing limitations, Menninger's work was a primary agent in turning attention to the possibility that certain processes may intervene to effect the outcome of any damaging effects of stress. Further, his work is noteworthy for demonstrating an important psychological parallel with the established work on physiological homeostasis (e.g., Cannon, 1929; Selye, 1956).

After Menninger, few investigators sought to concentrate on coping as a subject of exclusive study until the popular work on coping by Mechanic (1962) reaffirmed its importance. Mechanic's study, where he carefully observed and interviewed doctoral students and their families prior to and during their qualifying examinations couldn't fail but capture the imagination of many researchers who were all too familiar with the situation. Mechanic, however, continued to conceive of "defense" as separate from "coping," defining the former as reflective of one's feelings about the situation and the latter in terms of how one directly dealt with the situation.

Lazarus (1976b) has suggested a taxonomy of coping which emphasizes two major categories: direct actions and palliative modes. Subsumed under direct actions are examples such as fight or flight. Coping responses which do not actually alter the threatening events are considered "palliative." Examples would include defense mechanisms, deployment of attention away from the stressful event, or somatic responses such as taking tranquilizers. Lazarus points out, however, that the use of one category does not preclude the other. Rather, he notes, "all of us employ complex combinations of direct actions and palliative methods to cope with stress" (Monat & Lazarus, 1977, p. 9).

Pearlin and Schooler (1978) distinguished several types of coping according to a tri-partite classification scheme. They saw a fundamental difference among social resources (i.e., the interpersonal network), psychological resources (i.e., personality characteristics and defenses), and specific coping responses (i.e.,...
behaviors, cognitions, and perceptions). That is, undoubtedly, a comprehensive framework. Pearlin and Schooler simplified the previously unwieldy concept of coping by stating: "Coping responses represent some of the things people do, their concrete efforts to deal with the life-strains they encounter in different roles" (p. 5). Further, one intuitively senses the correctness of separating out and thereby emphasizing the interpersonal network as an important category of coping resources.

While the vital aspect of interpersonal support (either the giving or receiving) has long been noted by humanistic social scientists, it has, if considered at all, generally been relegated to one type of coping similar in importance to all other types. But one clinician, Springer (Note 4), has found remarkable results with psychiatric patients who entered a model of group therapy he composed based, in its ideal form, on the support one patient gives to another. This attests to the utility of interpersonal support in terms of practical application.

Unfortunately, however, from the perspective of the objectives of this study, after proposing this ambitious classification schematic, Pearlin and Schooler dismiss defenses within the personality domain as being without coping function. One is left to wonder if this lack of report is due to the specific manner in which coping was measured as Pearlin and Schooler suggest, or if there was lack of significance in their findings. Since Pearlin and Schooler note the former to be the case, and further, since their study focuses on 17 coping mechanisms within the classification of "coping responses," some revision may be in order.

Pearlin and Schooler delineated 17 coping responses according to their functions within four social areas. However, the types of coping mechanisms which have been generated from the literature capture a range far greater than
17. While specific elucidation rather than general vague definitions are appreciated, the possibility that pertinent coping mechanisms developed from both social and psychological resources were not examined. The theoretical framework for this study suggests that there are specific coping mechanisms which arise from social and psychological resources which, while similar in function, are also intrinsically different from Pearlin and Schooler's general classification of "coping responses." Rather than attempt to replicate their results or further refine any one category, the preferred stance is to operationalize a modification of Pearlin and Schooler's schematic so as to provide future formulations of more incisive theorems and hypotheses.

Thus, Pearlin and Schooler's categories for the purpose of this study, serve to define not only the general field of resources but the specific acts of coping developed from these resources. The classification categories within this study are defined as follows: (a) social resource responses represented by the interaction with the interpersonal network and specifically denoted by such acts as helping or being helped by others, (b) psychological resource responses represented by characteristic defense operations (e.g., denial), (c) active coping responses represented by outgoing behaviors, cognitions, and perceptions (e.g., mastery of a task, optimistic faith, and selective ignoring).

One obvious omission in this revision is the lack of consideration for personality characteristics which Pearlin and Schooler included in their category of psychological resources. However, while personality characteristics may (or may not) determine a particular coping response, it would be confusing and possibly erroneous to assume that a personality characteristic is indicative of, or can be inferred from, the coping response. In fact, there are research studies in which no relationship has been found between a trait measure of coping, that is a personality characteristic, and the actual process of coping (Cohen &
Lazarus, 1973; Lazarus et al., 1974). The point is that one cannot assume that a particular personality trait would manifest as process. Therefore, the coping responses included under "psychological" in this study refer to those generally identified in the traditional or analytic literature. As a result, defenses are considered as a potent coping resource in the psychological domain and some of the mechanisms which Pearlin and Schooler included in this domain (such as mastery) were reclassified as "active" coping mechanisms for both clarity and consistency in keeping with traditional lines of inquiry. Thus it must be emphasized that while the initial Pearlin and Schooler classification scheme serves as the basic framework of inquiry in this study, the particular coping mechanisms selected to be included within this tri-parte classification may differ, in some cases, from the Pearlin and Schooler conceptualization.

Specificity and Efficacy of Discrete Coping Responses. The perception, interpretation and defense against threat remain sufficiently varied among humans as to give a panorama of responses. However, the key issue in any discussion on coping, as Benner, Roskies and Lazarus (in press) have pointed out, must be the evaluation of coping adequacy. Until fairly recently, the topic of efficacy was not even questioned in the literature since studies in the social sciences and medicine overwhelmingly gave the impression that we deal with stressful elements through the classical elements of the mechanisms of defense. As defenses, with the exception of sublimation, were generally considered maladaptive responses relying heavily upon avoidance and reduction of information, little concern was given to their possible efficacy or potential adaptive worth. In recent years, this rather narrow viewpoint has been supplanted with the more enlarged perspective that defenses, as a coping behavior, may not be necessarily bad but, in fact, may serve a highly adaptive purpose preventing the personality from further disintegration. With this insight,
the whole field of coping gradually expanded in a search for other clues as to how the individual deals with stressful experience. This interest has been strongly reflected in studies of difficult circumstances perhaps because, asDimsdale (1978) advised, "the term 'coping' should be reserved for this effort at fighting off severe stress" (p. 404).

The following review considers the findings regarding the specifics of coping mechanisms and particularly their effectiveness within situations which are life-threatening. The first portion of this section examines coping with impending death, sudden injury or illness. The following portion reviews the results of the literature on the specific coping mechanism of denial stressing its possibly potent influence as a beneficial coping response and the confusion in direct findings to date. The third part continues the findings in difficult circumstances by examining studies dealing with the stress of war. Finally, the review of coping closes with a discussion of a particular aspect of one war, internment in a Nazi concentration camp during World War II.

Coping Reviewed in Trauma Studies. "How one copes with the monumental change of life focus determines mental health in all the years to follow" (Peterson, 1980, p. 926). Ironically, there is no change in "life" greater than the knowledge of impending death. Kubler-Ross (1969) based her classic observations for coping with death on her work with terminally ill patients. She described four processes in response to impending death: (1) Denial and isolation: "No, not me; it can't be true." (2) Anger, resentment: "Why me?" (3) Bargaining: "If you'll only give me . . . then I'll . . ." (4) Depression: "What's the use?" (5) Acceptance: "withdrawal and a final rest."

Shneidman (1973) did not find five definite stages but a process more fluid and complex. Weisman (1976) also found the stages, particularly denial, more complex. Proceeding, however, through the stages identified by Kubler-Ross,
denial was followed by anger. According to Peterson, "the opposite of denial is anger and for some persons it may be the coping mechanism of choice," (1980, p. 932). Many therapists have recognized that catharsis through the expression of anger can be an integrating experience, while anger that is suppressed may become depression.

Although Kubler-Ross did not specifically identify it as such, her work implies that a supportive interpersonal network is also an important coping resource for the dying patient. The sustaining of interpersonal relationships is such an effective coping response that it can literally postpone impending death. Weisman and Worden (1975) found that among patients with advanced cancer, those who lived longer than expected had maintained an active interpersonal network. In another study Peterson (1980) reported that in a broadly surveyed group of elderly people from diverse populations, over 90 percent wanted to die at home, and they wanted their families, not a doctor or religious officiary, to be there. This should not be taken to mean however that religious faith was unimportant. Indeed, Peterson also reported that as many people evaluate their situation, they find courage in their faith. In fact, one-third of those surveyed found their greatest comfort in their religion.

Finally, Peterson found that another important coping mechanism came from thoughts regarding successful past achievements. About 40 percent of Peterson's sample stated that memories of work well done helped them the most.

In studies of parents whose children had leukemia, Friedman, Chodoff, Mason and Hamburg (1977) observed the ways parents coped with the impending death of their child. While they noted that each parent reacted to the tragedy in a unique manner according to their own personality structure and the specifics of the threatened loss, they also shared common modes of response to
the similar problems all parents faced. In addition, these responses occurred in characteristic sequence.

Initially, upon learning of the diagnosis, there was "shock" exhibited by extreme isolation of affect, a mechanism Friedman et al. (1977) describe "by which the apparent intellectual recognition of a painful event is not associated with a concomitant intolerable emotional response" (p. 36). The state of shock was generally followed by a form of intellectualization which allowed the parents to gather information and talk realistically about their child's condition. However, during this phase, the continued emotional paucity of feeling was noted not only by the hospital staff but often by the parents themselves who would occasionally verbalize their confusion and guilt over not feeling worse.

Another defense, according to Friedman et al., present to a greater or lesser degree, was denial. Many parents refused to acknowledge the seriousness of the illness and prognosis. In an earlier study of parents with children under treatment for leukemia and other malignant diseases, Chodoff, Friedman and Hamburg (1964) found that parents who denied the inevitable outcome and thereby appeared to accept the diagnosis calmly had a more distressing reaction to death and post-mortem mourning than parents who had initially responded to the diagnosis with anticipatory grief reactions. Similarly, Janis (1965), in his study of surgical patients, found that patients with a relative absence of pre-operative fear displayed significantly more disturbed reactions of anger and resentment during post-operative convalescence than patients with either moderate or extreme fear before the operation.

Motor activity also appeared to serve a coping function although the parent was at least partially aware of the motivation behind this activity. In some cases there was considerable activity which took the parent away from the child. However, for some parents, this heightened activity was often directed
specifically toward the personal care of the child. Participating in the care of their child has been emphasized in other studies (Bierman, 1956; Knudson & Natterson, 1960; Orbach, Sutherland & Bozeman, 1955; Richmond & Waisman, 1955) and was more evident in women.

Interestingly, close friends and relatives, especially grandparents of the child, did not appear to offer the necessary social support initially expected by the parents. Often the continual requests for information from friends and relatives, and their expressions of disbelief, aggravated the parent's distress. The major source of emotional support for most parents during the period of hospitalization appeared to be other parents of similarly affected children thus recalling once again the effectiveness of this type of interpersonal peer network referred to earlier in the psychiatric group work devised by Springer (Note 4).

Another common coping response was the parents' "search for meaning." The possibility that a tragedy of this magnitude could be a "chance" or meaningless event was untenable. Explanations were constructed from a variety of sources until one appropriate to their particular frame of reference could be accepted. Similarly, the attempt to attribute meaning was often intertwined with the parents' religious beliefs and orientation. However the tendency, barring the successful rendering of attaching meaning to the event, towards fatalism, was also marked in such statements as, "it's God's will." In contrast, other parents began to doubt their previously unquestioned faith.

In the Friedman et al. (1977) study, hope, from a clinical standpoint, proved to be the most effective coping mechanism both in terms of compatibility of effective behavior and in intellectual acceptance of reality. However, as the disease progressed, there was usually a corresponding curtailment of hope. The decrease in hope appeared inversely related to the increasing presence of
anticipatory grief, a mode of behavior first identified by Lindemann (1944). While the amount of anticipatory grief varied, it was always apparent as the child's disease traversed its fourth month or first acute critical episode. The symptoms of anticipatory grief included complaints of somatic symptoms, apathy, weakness, and preoccupation with thoughts of the ill child.

Finally there was the process of "resigning" oneself expressed often by the wish that "it was all over with." During this phase there was less understanding on the part of the parents for any disruption of routine and they frequently expressed brief episodes of anger, followed by spontaneous denial of such feelings. The actual death of the child was generally accepted calmly as "an anticipated loss at the end of a long sequence of events" (Friedman et al., 1977, p. 369). However, in an earlier study, Hamburg and Adams (1967) added that the few parents who did not display anticipatory grief "experienced an exceptionally prolonged and distressing reaction after their child died" (p. 208).

The previous studies cited all provide an element of time through which the individual might prepare or adjust to the situation. Anticipation as a key factor in the management of severe stress has also been emphasized by Janis (1958, 1974). In his studies of surgical patients, the work of worrying was developed through time and allowed for preparation in dealing with the stressful event. While the concept proposed by Janis has not always been replicated in similar studies (Cohen & Lazarus, 1973) and indeed there are conflicting findings regarding the potential benefits of time to negotiate a crisis, it is generally agreed that the removal of time can sharply augment the degree of perceived or felt stress. Two types of studies from unanticipated crises, polio and burn victims, will now be reviewed to compare against the previous studies which incorporate a time element, to detect any possible differences in the types of coping mechanisms which are utilized.
With regard to coping responses, the studies by Hamburg and Adams (1967) of responses to severe burns and poliomyelitis, have provided useful insight not only into the specific responses employed but also their possible efficacy. Overall, suddenly and severely damaged persons employed a variety of coping techniques at each stage of the illness or injury. Although there was considerable individual variation in coping, a broad sequence was observed. As in the parents of terminally ill children, the severely injured patient generally first expressed denial, which Hamburg and Adams believed to "serve a useful function in preventing the patients from being overwhelmed and permitted them to make a more gradual transition to the exceedingly difficult tasks that lie ahead" (p. 278). Denial then appears to be a key coping response during the initial confrontation of an extremely stressful condition and especially so when the threat occurs without warning.

Denial was generally followed by acceptance of reality which manifested as an intense search for information. As they moved towards acceptance of a usually painful reality, periods of depression were regularly observed.

Group membership in a deeply meaningful sense was also an important factor in coping effectively with a disability and considerable testing of key figures took place to determine if new patterns of interaction would be required. In fact, Hamburg and Adams state: "We are impressed with the importance of feeling needed in one or more reference groups — a sense that one's presence is not only valued by significant other people, but is virtually indispensable to them" (p. 279).

In spite of this broad sequence of reactions, however, Hamburg and Adams emphasize two points: (1) many patients show remarkable resiliency and resourcefulness in adjusting to their own personal trauma and (2) there is considerable individual variation in the coping methods which characterize the
individual's attempts to come to terms with his or her situation. With respect to the latter point, Hamburg and Adams offer no description of the individual's specific coping process. Understanding this variation, however, may have provided insight into any differences in the resiliency mentioned in the former point.

In terms of detecting an array of specific and effective coping responses, the life-threatening impact of polio studies by Visotsky, Hamburg, Goss and Lebovits (1961) have been detailed and comprehensive. As in other instances of sudden, severe disabilities, Visotsky et al. indicate that a substantial proportion of polio patients make impressive psychosocial recovery. The fact that such positive outcome is both surprising and frequent prompted the authors to ask: "How is it possible to deal with such powerful, pervasive, and enduring stresses as are involved in severe polio? What are the types of coping behavior that contribute to favorable outcome?" (p. 424).

Visotsky et al. observed the following common patterns of response which appeared to favor positive psychosocial outcome. First, the initial diagnosis was usually met by avoiding or minimizing the conditions. Second, a strong, close, continuing relationship with family and close friends signified the patients who "were consistently among those who were best adjusted by any reasonable standard" (p. 427). The importance of the interpersonal network extended to the community, giving patients a sense of worth and belonging. Hints of other supportive factors were also suggested in the study, but were not detailed. As avoidance defenses decreased, there appeared to be a concomitant rise in religiosity, but not fatalism as exemplified by increased requests to see a cleric but suggestions "to have faith . . . the Lord will make everything all right" (p. 428) were met with disbelief or anger.
Patients also projected their concern on to other family members, particularly children. Most effective, the authors noted, was projection which shifted the patient's entire focus of attention away from himself; least effective was the coping variation wherein the patient sought solace by expressing a preference to having the illness himself rather than having his children suffer from it.

Intervention by helping professionals did not provide an effective coping resource for more than half the patients in the study. The authors suggest that reports of overly optimistic "promises" may have discouraged any psychological benefits. However, specific, genuine reassurance, particularly from a person of high status, was a highly important coping resource.

Approximately one-third of the patients exhibited a self-determined effort to improve. In some cases this type of attitude was fostered by the interpersonal network, the community, or hospital staff, but in all cases the authors concluded that this determined attitude was an asset to those who had it.

Acceptance of the disability, which is the opposite of denial, encouraged important therapeutic efforts. However, acceptance seemed to be gained slowly, over time.

Interaction with other patients was useful, primarily to stave off isolation which was viewed by the patients as quite threatening. Pairing of patients often afforded a sense of security or competence that otherwise might not have been preferred. In addition, the experience of going through extreme stress together, made the interpersonal relationships intense and meaningful. The patients also helped each other through particularly difficult times, showing support and a great deal of sensitivity when they were most needed. In addition, there was an
obvious effort by many of the patients to reassert old, familiar routines which may have served to heighten feelings of security.

Emotional constriction was viewed as both beneficial and detrimental. Where the emotional responsivity served to effect isolation from others, it was not helpful; where the constriction served to control intense anger, it was a useful defense.

Other factors which impressed the investigators with their long-term functional utility were (1) a sense of humor, (2) taking responsibility for new efforts and skills, (3) acting diplomatically as a leader or an "old timer" in giving or interpreting information, (4) avoidance of complaint, (5) planning for the future, (6) activity, initiative, and mastery - even of exceedingly small acts, (7) testing and affirming their personal attractiveness to members of the opposite sex, (8) fantasy bargaining, especially for attainable objectives, (9) a sense of moral superiority or martyrdom, and (10) effective mastery of previous, difficult experiences.

This brief overview of a very detailed study omits coping responses from other individuals besides the patient and external factors such as the sociological benefit of economic security and the conflicting reports of the benefits of time passage. Further, this review collapsed findings from several different conditions and aspects of the illness to provide the commonalities. In this sense, there was one coping response which the authors felt so significant that it has been reserved for special emphasis at this point.

One of the most, if not the most, salient observations to come out of several studies of severely ill patients is the importance of hope (Davis, 1956; Hamburg, Hamburg, & deGoza, 1953; Visotsky et al., 1961). The presence of hope appears to eclipse all other forms of coping in terms of its major impact. It is the crucial sustaining force in the midst of personal crises. However, hope
for that which is impossible also could seriously impair the patient's perspective of reality.

Just as hope is generally agreed to be the most consistently beneficial coping response regardless of the type of trauma involved, perhaps the most conflicted findings center on the response of denial.

The Issue of Denial. Denial, as Lazarus (1982) has pointed out, is often confused with avoidance. Weisman (1972) dichotomized denial between a repudiation of facts versus acceptance of facts but repudiation of the worst implications. Even in theory, denial has undergone shifting conceptions. A thorough exposition of the development of denial in the theoretical literature has been reviewed by Sjöback (1973) but by way of illustration, it may suffice to briefly note the difference even between Freud and his disciple and daughter, Anna. Freud assumed that denial occurred only in psychosis. His daughter, however, appears to regard denial as having a positive clinical potential (Lazarus, 1982).

Due to the confusion surrounding both the definition and concept of denial, it is worth examining more closely than the other more obvious coping mechanisms. The topic of denial is particularly salient to a discussion on coping since recent research has redefined denial from a maladaptive response to a potentially and functionally adaptive one. Both Weisman (1976) and Peterson (1980) found that "denial is essential to hope, to serenity and to a good death" (Peterson, p. 929). Again, trauma studies would appear to present an appropriate avenue of investigation since both the costs and benefits of denial are more readily apparent within such a context. Further, examination of denial through the exploration of damaging adaptational outcomes and constructive ones provides, according to Lazarus (1982), the clearest exposition of any differentiation.
The most pertinent present day thought of the damaging consequences of denial is rooted in the works of Lindemann (1944) and Bowlby (1961) both of whom studied grieving. Essentially they found that denial, while a typical grief response, also prevented the person from coming to terms with and passing or working through the grief process. In studies of severe trauma such as spinal cord injuries (Dembo, Leviton, & Wright, 1956; McDaniel & Sexton, 1970), a similar result was found.

Janis (1974), in his studies of patients expecting surgery, found that denial was associated with high distress and later behavioral difficulties. As noted previously, however, the results which Janis found have not been consistently reported in later studies.

Lack of clarity in findings has also been the case with the research on avoidance versus vigilance. While the former makes use of the tactic of repression and the latter sensitization, as opposite extremes on a continuum of coping, the difference is not clear cut. At the risk of oversimplifying a complicated issue, avoiders essentially deny the threatening content of the issue whereas vigilants not only accept the threatening implications but may even elaborate on them. The benefits of each characteristic mode are still in doubt however and it is questionable if the overlap, such as those who are termed non-specific defenders to describe the notion that they fall into neither category, can truly be separated out.

One of the clearest demonstrations that denial can have damaging, to the point of life-threatening effects, is to be found in the research on reactions to potential breast tumors (Katz, Weiner, Gallagher, & Hellman, 1977). In his 1970 study, Katz et al. found that there had often been considerable delay in seeking medical attention. In the 1977 study, Katz et al. described a number of specific coping mechanisms similar to those reported in other trauma studies. These
responses included both active outgoing behaviors as well as intrapsychic defenses. Here, however, Katz et al. noted that denial was accompanied by rationalization and "was clearly, the most commonly employed defense pattern in our group of subjects" (p. 237).

Denial in other life threatening situations has also been reported and illustrative of that are the reports by Hackett and Cassem (1975) of men who did vigorous pushups or climbed flights of stairs to deny the reality that they were having a heart attack.

While it might have been sufficient to stop at this point some years ago when denial like other "defenses" was generally agreed to be a destructive process, the shift towards preventive treatment and positive mental health has provided studies which reevaluated the place of denial. The following studies have been particularly instrumental in supporting the premise that denial may in fact be a healthy coping response.

In contrast to Janis (1965), Cohen and Lazarus (1973) reported that pre-surgical patients who avoided relevant information showed a more rapid recovery post-surgically, fewer minor complications, and less distress than vigilant patients. However, the outcome indices may have been confounded, as Lazarus (1982) reports, because physician decisions to release the patient may have been based on the manifest, apparently happier attitude of the patient rather than on more objective signs of recovery.

Although it may be intuitively more reasonable to suggest the value of denial within a framework of time passage, again the ultimate test of its efficacy may lie in unanticipated events and the long-term consequences of using denial as the coping mechanism of choice. In this regard the work of Lifton (1964, 1967) has been particularly helpful in weighing the evidence of the efficacy of denial.
Lifton studied in depth the effects on survivors of the bombing of Hiroshima. He found that denial facilitated ultimate adjustment by allowing the survivors to engage in a "psychic closing off." In this sense, then, where time to adjust is not available, denial provides an artificial time frame which, according to Lifton, affords the person an opportunity to adjust to the devastating early period of loss and threat.

Victims of severe, incapacitating burns (Hamburg, Hamburg, & deGoza, 1953), of paralytic polio (Visotsky, Hamburg, Goss, & Lebovits, 1961) and other traumatic events, have repeatedly reported, as mentioned previously the importance of denial in affording the person time to adjust to their crisis (Hamburg & Adams, 1967). Davis (1963) also observed a similar pattern in his work with parents of children who have polio. The positive adaptational consequences of denial have also been reported in studies of cancer (Cobb, Clark, McGuire, & Howe, 1954).

Bearing in mind that the issue of repression-sensitization is not clear cut and the measures also suspect, Dinardo's (1972) study of spinal cord injuries indicate that repressors display greater self-esteem than sensitizers. This finding is supported by a moderate correlation with the ratings by physical and occupational therapists and nurses who report that repressors seemed to do better.

Individuals with acute myocardial infarction who were identified as deniers, have been found in several studies (Hackett, Cassem, & Wishnie, 1968; Stern, Pascale, & McLoone, 1976) and are generally more optimistic, return to work and sexual functioning more readily, suffer less post-depression and anxiety, and in general show better post-coronary adjustment.

Further supportive evidence for the process as well as the efficacy of denial, has come from the recent findings in biochemistry regarding the role of
a pituitary secreted hormone, endorphine-B. Under stress, the pituitary gland secretes ACTH. However, recently it has been shown (Guillemin, Vargo, Rossier, Minick, Ling, Rivier, Vale, & Bloom, 1977) that another hormone, endorphine-B, acts as an analgesic and psychedelic affecting the morphine-sensitive brain tissue. As a neurohumoral analogue to the psychological process of denial, it may be that the secretion of endorphin-B can help explain circumstances in which people suffering from physical injury, such as the wounded soldiers described by Beecher (1956-1957) seemed to evidence a remarkable absence of pain and, indeed, acted either oblivious or euphoric under conditions of extreme physical distress.

Coping Reviewed in War Studies. War has often provided the setting in which one may examine how people respond to sudden extremely stressful circumstances. Perhaps the most famous studies to emerge from war, pursuant to the topic at hand, are the works of Robert Lifton who, as noted previously, studied in meticulous detail the effects on survivors of the atom bomb attacks on Hiroshima. Unfortunately, from the perspective of the present study, while Lifton offered a vivid picture of the psychological states of people who survived this extreme test, little attention was given to examining their specific coping responses.

Military combat, however, has provided literally hundreds of published studies about the reactions of the men involved. One of the earliest studies was reported by Brill (1946). Investigating American prisoners of war repatriated from the Japanese, he found that the men were generally optimistic upon their return and evidenced little hostility. However, the group which returned appeared to be above average in intelligence and stability, a finding which again evokes the Darwinian hypothesis of the survival of the fittest. The prevalent coping responses used by these men during captivity were courageous
or positive thinking and attitudes, emotional detachment, belief in one's superiority over the enemy, and a refusal to give up hope. Interestingly, religious beliefs, socio-economic background, and education were not significantly differentiated and were therefore not considered by Brill as important variables.

Nardini (1952) based on his own experiences as a prisoner of the Japanese, believed that the key coping responses which contributed to survival were a "will to live," fantasy and the ability to repress and suppress an awareness of ever-present death, adroitness in thinking, and cunning. Two factors, emotional unresponsiveness and a sense of humor, were also considered vital.

One recent prisoner of war incident is of particular value to this study since it specifically examined the efficacy of different coping responses. In 1966 the U.S.S. Pueblo was attacked and the crew captured by North Korea. This event came to be known as the "Pueblo Incident." For almost one year the crew members were threatened with death, interrogated, and in some cases, beaten. Conditions by Western standards were extremely deficient.

When crew members were asked how they coped with their incarceration, they frequently stated that they maintained faith in their commanding officer, religion and country, and they conscientiously maintained their interpersonal support.

Spaulding and Ford (1976), in reviewing the after-effects of these POWs, concluded that those with a more favorable post-captivity outcome had been able to isolate their affect and entertain themselves with fantasy. Most of them also used rationalization to protect themselves from any thoughts that the Koreans might kill them. Factors associated with poor adjustment included youth and personality characteristics of obsessive-compulsiveness, passive-dependency, and emotional instability.
Given that studies of prisoners of war have contributed substantially to the understanding of both the coping responses used to ameliorate the stressful conditions of captivity, and in addition, have provided an evaluation of the efficacy of these mechanisms, a specific war-time situation will be examined in detail in the following section: internment in a Nazi concentration camp.

Coping Reviewed in Holocaust Studies. The Nazi concentration camps subjected inmates to extreme measures of environmental and personal brutality. The survivors today who are able and willing to talk about their experiences provide paradigmatic models for long-term coping with extreme stress. With that basis, this study focused on the demands of internment in a Nazi concentration camp and the efficacy with which these demands were resolved as measured in later adjustment. Fortunately, the Holocaust literature has disclosed ample evidence regarding the specific acts of coping which added to the findings reviewed earlier form the basis for this assessment.

Grinspoon (1964) stated: "We know there are people who have an extraordinary capacity to endure incredible threats and suffering with minimal detectable psychological disturbance" (p. 121). Yet the question remains, how? It is specifically to answer that question that a study of Holocaust concentration camp survivors merits attention. Given the premise that, like the victims of any major trauma, we would not be surprised to find gross psychological disturbance, the fact remains that many survivors have rebuilt their shattered lives, deal with their memories appropriately and appear to evidence a relatively healthy psychological make-up. This remarkable ability to transcend an event of awesome magnitude in its evil and horror suggests that such individuals employed effective psychological processes to protect themselves.
However, efficacy of any coping response in a Nazi concentration camp cannot, as one might initially assume, be based on the idea that only those individuals who used highly effective actions, survived. "Not only did many factors outside the control of the person determine his or her fate (e.g., age, sex, race, religion, food supply, camp and work assignment, physical strength and health), but the odds were overwhelmingly against survival. In a situation where only one out of 600 survived, to link outcome to coping skill would be not only unreasonable but unprovable" (Benner et al., 1980, p. 221). Recognizing the overriding element of luck is essential to the understanding of this or any similar study of Holocaust survivors because overall it is the one fact that enabled any individual to survive the horrors of internment in a Nazi concentration camp. Incorporating the essential factor of luck into the analysis, one should also consider the possibility that as many people who may have coped ineffectively survived as those who coped effectively. Juxtaposed against this disclaimer however is also the fact that together with luck, extraordinary individual conditions had to prevail in order to ensure survival. Hence, it took rather extraordinary persons to survive through such generally lethal experiences as typhoid epidemics, beatings, starvation, and other torments. In a sense, the evolutionary perspective of only the fittest shall survive, has in many cases been reaffirmed under these tragic conditions.

There are only a few published scientific studies to date which have directly sought to explicate the coping mechanisms used by the survivors while interned in a concentration camp. The best developed of these studies have been by Dimsdale (1974, 1978, 1980a, 1980b) who repeatedly found seven specific coping styles each of which included a number of discrete mechanisms. All of the coping styles directly affected survival. Beyond demonstrating that even under stressful conditions of unimaginable magnitude people can and do
cope, perhaps his second most important finding was that while many survivors used a complicated variety of coping mechanisms, about one-third maintained one preferred style of coping. Further, although Dimsdale concluded that "coping flexibility is of great importance" (1978, p. 410) a preferred method of coping such as group affiliation and hope was also highly effective in reducing stress and supporting healthy outcome.

In addition to the finely detailed examinations by Dimsdale, hundreds of memoirs and related studies are available which indirectly lend themselves to an analysis of the specific acts in question. First, however, it is important to be briefly reminded of the conditions under which the concentration camp internees lived so as to establish the parameters within which any coping response must be evaluated.

The concentration camp was a world unto itself whose boundaries literally could not be penetrated. Time in both a real and abstract sense was meaningless since death could be imminent or confinement permanent. There was little, if any, respite from the daily hardships. The camps were organized to systematically destroy the humans they contained. But first, for the prisoners, there was often a long, agonizing process of dehumanization. The ultimate aim of the Nazis, if extermination was not intended immediately, was "regression to a state of child-like dependence in which the prisoners would become helpless instruments in their master's hands" (Bluhm, 1948, p. 15). To effect their purpose the camp masters implemented a massive number of oral- and anal-sadistic techniques. The opportunity for resistance against the pervasive forces was pathetically limited. Nevertheless, such resistance did occur, often in small acts of decision making (e.g., Should I eat the whole piece of bread now, or save a crust for later?) and through internal attitudes (e.g., They can strip me of my clothes but not my self-respect).
For many prisoners the hardest thing to integrate or accept was the lack of meaning in their experience. Frankl (1959), a psychiatrist and also a concentration camp survivor, developed his psychotherapeutic theory on the basis of his experience while a prisoner. He felt that the attribution of meaning was the raison d'être for living. Thus, one of the central coping strategies was directed, often through religious avenues, to a search for meaning in suffering. However, given that no meaning or ultimate reward could be found, perhaps it is not surprising that 45% of the survivors who relocated to Israel after the war reported that they had lost their religious faith as a result of the camp experience (Eitinger, 1964). Wiechert (1947), a deeply religious man before his internment, gives a vivid picture of this loss of faith. As he left the camp he turned to look at the remaining prisoners and "from everywhere they waved to him, stealthily, and almost with their eyes alone. 'God be with you! God be with you!' had been the cry of the convicts in Dostojewsky's House of the Dead. But here they could not say 'God is with you.' God had forsaken them and died" (p. 129).

In spite of this inability to find meaning in their suffering almost all of the survivors report that they attempted to find meaning in survival. In fact, finding some purpose to their existence, literally a "will to live" no matter how small or trivial the consequences, seemed to aid survival (Dimsdale, 1978; Frankl, 1959; Heimler, 1963).

Given the overwhelming onslaught on the physical and psychic senses, one of the most effective barriers to disintegration was denial. This allowed the individual to cognitively evaluate only those portions of the experience which could be managed and the ability to deny what was happening, even for a short period of time, often provided another mode to survival (Benner et al., 1980). However, if cognitive appraisal was reduced to the point of complete apathy, death was almost certain. This stage of cessation was so prevalent that the
inmates gave it the name "musselman" (Bettelheim, 1960; Frankl, 1959). Rarely did one return "to life" from the musselman stage without the active intervention of another.

Although the concentration camp produced a definite uniformity of stressful conditions and a certain likeness of common responses (Bettelheim, 1943; Bondy, 1943; Chodoff, 1975), there was wide individual variation in these responses, often based on a person's attitudes, values, or beliefs. Some became deeply religious in their interpretation, others became highly inner-directed, still others focused exclusively on dissecting small external acts which they thought might alter present circumstances.

Deliberate decisions were often repeatedly made as, for example, when Frankl (1959) and Eitinger (1964) describe how some of the inmates rationed their bread or deliberately decided "to enjoy a joke or a sunset" (Benner et al., 1980, p. 238). Choosing one's own attitude provided a sense of active mastery under conditions of limited or no control. When such conditions however, become so ambiguous as to defy intelligent interpretation, many of the inmates chose to let fate decide the course of events. No where was this attitude more prevalent than during the countless times when the wrong decision would have meant death. At such times Frankl (1959) reports, "The prisoner ... preferred to let fate make the choice for him" (p. 56).

The process of making a deliberate decision is also apparent in what Dimsdale (1978) refers to as "differential focus on the good." He describes this process as "essentially a 'figure-ground' problem; a person at all times has a choice what to focus on - the good or the bad. In most instances camp inmates adjusted their demands for pleasure so that these demands were consistent with the environment. Thus many focused on the small gratifications of getting
through the food line without a beating and ignored the larger tragedies of the camp" (p. 407).

Since the opportunities for control were so limited, Benner et al. (1980) remarked, "By far the most important forms of coping ... were intrapsychic, that is, were founded on what the prisoners told themselves, what they kept their minds on, and what reasons for survival could be constructed out of the bleakness and misery of the situation" (p. 239).

Removing oneself psychologically in some cases allowed the prisoner to transcend the reality and consequential impact of the experience. Bettelheim (1960) and Frankl (1959) both describe their efforts to record the events while incarcerated as an attempt to psychologically remove themselves from their compelling reality. Bettelheim (1943) also reported that "later he learned that many prisoners had developed the same feeling of detachment, as if what happened really did not matter to oneself" (p. 431). Yet, Bettelheim also emphasizes the opposite, that is, how important everything was, that at all costs the prisoners struggled not only to remain alive, but unchanged. He describes "magical thinking": "If nothing changes in the world in which I used to live, then I shall not change, either" (p. 440). Closely aligned to magical thinking, but substantially different, is fantasy. For example, Bluhm (1948) in reviewing 12 autobiographical accounts of survivors, found that

the need for pleasure, deprived of almost all objects in the sphere of reality, took refuge in the last resort of the poor defeated, in fantasy. All authors emphasize the endless discussions of food among the inmates. Much like the ship-wrecked in a raft, they exchanged memories of the splendid meals they had had in the past; they fancied what they would eat on the day of their liberation; they worked out elaborate menus; they discussed recipes; they talked on and on, for hours ..." (p. 20.)

While highly controversial today, one other defense which has been reported should be mentioned. Many authors such as Bettelheim (1943), Bluhm (1948) and
Berger (1977) discuss "identification with the aggressor." Bluhm gives a thoughtful rationale that "the stronger the need for identification, the more a person loses himself in his omnipotent enemy — the more helpless he becomes. The more helpless he feels, the stronger the identification and — we may add: the more likely it is that he tries to surpass the aggressiveness of his aggressor. This may explain the almost unbelievable phenomenon that prisoner-superiors sometimes acted more brutally than did members of the SS" (p. 24).

Returning to deliberate, conscious response, one of the most profoundly effective coping resources which was discussed earlier in the literature on trauma, was the interpersonal network. However, the highly lethal conditions of the camp generally extinguished support from all close friends and relatives. Eitinger (1964) found that in Israel 80 to 90% of the survivors had lost the majority of close relatives and 75 to 80% were totally isolated by the end of the war. Nevertheless, it is rare to hear the testimony of a survivor who does not report at least one critical incident where the intervention of a friend, or in some cases a stranger, turned the tides of fate in their direction. Kautsky (1946) stated quite frankly that while nobody was ready to practice comradeship, still no one would have survived without it.

Finally, interwoven through the many memories and also identified by Dimsdale (1974; 1980a; 1980b) is the mobilization of hope. Hope offered a motivation to act where it was possible to make changes, and a method to endure that which could not be changed. As in the earlier reported trauma studies of patients with severely afflicted polio and among parents of fatally ill children, internees who used group affiliation and/or hope to sustain themselves "appear to have survived intact" (Dimsdale, 1978, p. 409).

In summarizing the concentration camp literature on coping, two important points emerge. First, how people cope with stress may be more important in
deciding outcome than the actual frequency or severity of the stress itself (Benner et al., 1980; Coelho et al., 1974; Meichenbaum, 1977, Monat & Lazarus, 1977). From a review of both the general medical trauma literature and studies on coping from the concentration camp, a tentative conclusion may be reached regarding coping. A flexible coping style is extremely important, but even for those with a preferred mode of coping, outcome may also be positive if that mode was group affiliation, hope, and perhaps denial. Second, while the bulk of the scientific literature emphasizes the long-standing pathological damage of the overwhelming stress of a concentration camp (Berger, 1977; Chodoff, 1963; Dor-Shav, 1978; Eitinger, 1964), still the personal memoirs and non-therapeutic observations point to something more hopeful. There were, there are, survivors who called upon the very depths of their resources and they did not emerge stunted or constricted. They emerged with a message. "Survivors want us to know of their experiences. The reason is obvious — to learn from the Nazi Holocaust, so we too can be survivors." (Boulton, Note 5).
CHAPTER III
METHODOLOGY

Overview

Through analyses of recorded interviews, this study identified various coping mechanisms used by Holocaust survivors during their imprisonment in Nazi concentration camps. The relationship between coping responses and current life adjustment was then investigated to determine the possible effectiveness of any particular coping response or style of response. The criterion for evaluating coping efficacy was determined from the total scores on a self-adjustment measure, the Life Satisfaction Index (Neugarten et al., 1961), as modified by Adams (1969) and referred to as the LSIZ.

The coping mechanisms identified in the interviews were first classified among three styles of coping according to (a) mechanisms which are derived primarily from social resources, (b) mechanisms which are derived primarily from psychological resources, and (c) mechanisms which constitute active thoughts, feelings, or behaviors. The predominate style of coping and the total score on the LSIZ for each subject were then compared to the other styles and their total scores in order to evaluate the potential effectiveness of any one preferred style as compared to others.

The specific coping mechanism of denial was investigated to evaluate whether denial or non-denial might be the more effective strategy in terms of later adjustment. Finally, the possibility that flexibility is an important determinate in coping effectively was explored by examining the total number of coping mechanisms used by any one of the survivors while interned in Nazi concentration camps.
Research Questions

There are a number of research questions which may be posed in a study of concentration camp survivors. Of particular interest, however, is the repeated question: "How did they survive?" (Bluhm, 1948). Therefore, and in order to advance our understanding of coping, the following research questions were investigated:

(1) Using a modification of Pearlin and Schooler's (1978) classification scheme (reviewed in the literature chapter under "Broad Dimensions of Coping") is there a significant difference in effectiveness, as measured by later adjustment, among the following three coping styles: social resources, psychological resources, and active coping.

(2) Is the coping mechanism of denial appreciably more effective than non-denial in terms of later adjustment?

(3) Does the sheer number of mechanisms in a coping repertoire have any bearing on coping effectiveness in terms of later adjustment?

Population and Sample

The specific population for this study consisted of American residents across the United States who survived internment in Nazi concentration camps. Survivors were selected from the files of the Southeastern Florida Holocaust Memorial Center. Although the Center is located in Miami, survivors from throughout the country were available as potential subjects either because they were permanent residents, winter residents, or visitors to Miami.

Since 1980, the Memorial Center has listed 377 survivors of the Nazi Holocaust who were willing to be interviewed. Of this number, 128 appeared to meet the criteria of (1) internment in a prison officially classified by the Nazis as a concentration camp, and (2) were categorized by the Nazis as "members of inferior races" or treated as such. In the former instance, the Nazis classified a
variety of prison camps according to the harshness of the conditions. However, as previously noted in the literature review, while the Class II concentration camps were similar in basic conditions, treatment of prisoners, and the possibility of imminent death, they were also often substantially different from the other classified camps (e.g., extermination centers) or the unclassified camp satellites (e.g., forced labor factories). Therefore, only those subjects who had been in an officially classified "concentration camp" were included in this study.

In like manner, the prison classification also substantially differentiated internees. Four major categories were defined by the Nazis: political opponents, members of the "inferior races," criminals, and asocials. Since the members of the "inferior races" received similarly harsh treatment and since, in most cases the destruction of their homes and communities forced many to emigrate, this category of former prisoners served as the primary focus for selection of the subject group. "Political opponents" whose experiences during incarceration appeared to match the treatment generally reserved for "inferior races" were also included in the subject pool.

From a constructed pool of 128 survivors who met the subject criteria, 70 were randomly selected and a letter was sent asking them to participate in a study on stress and coping (see Appendix A). All but three agreed to be in the study; one person did not complete the research questionnaires, and one was not going to be available during the months of data collection which reduced the sample to 65 individuals. During the course of the data collection one of the respondents became ill and was unable to be tested. Ten persons were later dropped from the sample pool when the interview conducted to confirm the information on file for the Center revealed that they were not in one of the camps from the criterion category. In addition, the quality of the recorded interviews for two subjects proved sufficiently poor as to make an accurate
transcription questionable. As a result, these two individuals were also eliminated so that the final subject group was composed of a total of 52 persons.

Of this final sample 49 had been classified by the Nazis as "members of inferior races." Of the three others, one had been interned because she had hidden a Jewish friend, was caught and subsequently treated as a "member of an inferior race," and the final two members of the sample were men who initially had been classified and tortured as political opponents but were also subsequently interned as "members of an inferior race." The sample contained 28 men and 24 women with a mean age of 64.096 and these as well as other demographic characteristics of the research subjects are shown in Table 1.

The LSIZ was administered as described in the section on "testing." It was scored according to the procedure used by Harris and Associates (1977) in their study of 2,797 older persons so that the results of the LSIZ scores in this study could be compared against the norms which Harris and Associates had established. Subjects who scored above the mean of the survivor sample constituted the "well-adjusted" group and survivors who scored below the mean constituted the "less well-adjusted" group.

Instruments

History Form. The Southeastern Florida Holocaust Memorial Center had developed a brief personal history form (see Appendix B). Information for this form was generally collected by Holocaust survivors at the Center office who had volunteered their time for this task. The questions on the history form were standardized and requesting information for this form was part of the routine processing for each survivor who was to be interviewed. Of particular interest was the information on this form indicating whether or not the person had been in Nazi concentration camps, and if so, which camps.
Table 1
Demographic Characteristics
of Research Subjects

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Variable</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td><strong>Employment</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28</td>
<td>Employed</td>
<td>19</td>
</tr>
<tr>
<td>Female</td>
<td>24</td>
<td>Not Employed</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Homemaker</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retired</td>
<td>26</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td><strong>Annual Income</strong> ^b</td>
<td></td>
</tr>
<tr>
<td>86 - 80</td>
<td>3</td>
<td>Over $50,000</td>
<td>11</td>
</tr>
<tr>
<td>79 - 70</td>
<td>10</td>
<td>49,999 - 40,000</td>
<td>4</td>
</tr>
<tr>
<td>69 - 60</td>
<td>22</td>
<td>39,999 - 30,000</td>
<td>1</td>
</tr>
<tr>
<td>59 - 52</td>
<td>17</td>
<td>29,999 - 20,000</td>
<td>8</td>
</tr>
<tr>
<td>51 - 60</td>
<td>28</td>
<td>19,999 - 15,000</td>
<td>6</td>
</tr>
<tr>
<td><strong>Education</strong> ^b</td>
<td></td>
<td>14,999 - 10,000</td>
<td>11</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>5</td>
<td>9,999 - 5,000</td>
<td>2</td>
</tr>
<tr>
<td>College grad/some college</td>
<td>6</td>
<td>Below - 5,000</td>
<td>1</td>
</tr>
<tr>
<td>High school grad/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>some college</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some high school</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grammar school or less</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Religion</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jewish</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>4</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td><strong>Religiosity</strong></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>40</td>
<td>Extremely religious</td>
<td>12</td>
</tr>
<tr>
<td>Divorced</td>
<td>6</td>
<td>Moderately religious</td>
<td>22</td>
</tr>
<tr>
<td>Widowed</td>
<td>5</td>
<td>Slightly religious</td>
<td>13</td>
</tr>
<tr>
<td>Single</td>
<td>1</td>
<td>Not at all religious</td>
<td>5</td>
</tr>
</tbody>
</table>

^a Sample size = 52.

^b Not all subjects chose to provide this information.
Biographical Form. A biographical form was developed specifically for this study to elicit demographic data not covered in the personal history form. This form (see Appendix C) was designed to generate a range of data which could be utilized to compare possible differences in coping responses. Included in this form were the typical questions often used in research to differentiate groups (such as socioeconomic and marital status) as well as questions which previous Holocaust studies had identified as differentiating variables (e.g., if married, whether or not spouse was also a survivor).

Interview Questionnaire. An interview questionnaire was developed based on the format used by the Holocaust Memorial Center with specific questions imbedded by the principal investigator to elicit detailed information on coping (see Appendix D for sample interview questions and Appendix E for the specific coping questions). The questionnaire consisted of 208 questions designed to assist in recall, via a standardized yet open-ended format, the respondent's experiences throughout the Holocaust. Specific coping questions were added to the questionnaire in order to encourage further description of the coping strategies used by the individual. Emphasis in the analysis of the interview was directed towards that portion of the questionnaire which elicited the respondent's experiences during internment in a Nazi concentration camp. A further explanation regarding the development of the questionnaire is contained in the section under "pilot study."

Psychological Measures. The following sections describe two measures which were selected to cull relevant data regarding the present day adjustment of the survivors and the coping mechanisms they used while interned in Nazi concentration camps.
The first measure, a self-report, was designed specifically for an older population and is used to differentiate the criteria variables of well-adjusted and less well-adjusted.

The second measure was developed exclusively for this study and simply provides a direct measure of the different types of coping responses which a survivor used while interned in a concentration camp. The second measure is unobtrusive in the sense that it was to be used for collecting the specific data of coping in the concentration camps from a recorded interview. For the subject, however, the purpose of the interview was to give historical information regarding their general and personal experiences before, during, and after the Holocaust. In addition, respondents were not notified that some of them would be invited to participate in this study until after their interview was completed. Ethically this was also an appropriate maneuver since these interviews were not available for research or other educational purposes until a release form prepared by the Southeastern Florida Holocaust Memorial Center and reviewed at the time of the interview had been signed. By employing an unobtrusive measure in this fashion, certain errors such as a Hawthorne effect or social desirability response sets if not avoided, may at least have been minimized.

Life Satisfaction Index Z (LSIZ). As part of a larger study of psychological and social factors involved in aging, Neugarten et al. (1961), using the individual's frame of reference, constructed tests to recognize the inner and outer aspects of successful aging. After examining measures of adjustment morale and extensive interview assessment, they operationalized the construct of life satisfaction by defining five areas of discrimination: zest, resolution, congruence, self-concept, and mood. A well-adjusted person is one who leads a satisfactory life. Such a person presumably faces living with zest rather than
apathy, has resolved life's predicaments rather than resigned to them, senses a congruence between desires and achievements, has good self-esteem and a high self-concept, and is optimistic rather than pessimistic. This operational definition of the LSIZ is congruent with the two main rival theories of aging, activity and disengagement. In other words, life satisfaction as measured by the Neugarten et al. scale may be positively related to activity for some people and to disengagement for others. Thus, the Life Satisfaction Index, as a multi-dimensional inventory of various aspects of behavior, forms a stronger base for mental health assessment than a unidimensional approach.

In addition, and in opposition to many of the stress scales which are formulated on a priori concepts, the Life Satisfaction Index is "directed to previously located natural personality structures and related to the way personality develops" (Savage, Gaber, Britton, Bolton, & Cooper, 1977, p. 77). Finally, since the scale was developed specifically for the aged population, it fulfills certain critical requirements which are often absent in similar measures. First, the scale is brief and straight-forward to administer, based on clearly defined observations and tests, and with wording that is easy for the testee to understand. In addition, the scale may be administered without benefit of complex technology or a laboratory setting. Savage et al. also noted that "because the measure deals with basic personality concepts, investigations on the aged with them become increasingly relevant to organized and integrated bodies of practical and theoretical knowledge in a number of important psychological fields" (p. 77). In sum, the definition of personal adjustment used in the present study and advocated by Kuhlen, 1948; Lebo, 1953; Rose, 1955; and others, is the individual's sense of happiness or satisfaction with life. Therefore, as the determination of successful or effective coping is based on the individual's long term personal adjustment, this adjustment criteria was
adopted in this study and was measured through the multi-dimensional approach of the Life Satisfaction Index (Neugarten et al., 1961).

The Life Satisfaction Index which measures the aforementioned five components of life adjustment in the elderly, was refined using both factor and discrimination analysis. Adams (1969) eliminated two of the original 20 index items by the use of factor analysis which resulted in a measure called the Life Satisfaction Index Z (LSIZ). When these two items were dropped discrimination values and reliability estimates of the life satisfaction measure increased.

Adams (1969) used two procedures to ascertain the reliability of the LSIZ items. First, he determined discrimination values (D) by trichotomizing the sample and comparing the percentages of yes responses to each scale item by the high and low scorers. All items in the LSIZ fell within the acceptable range of 20% to 80%. As a second reliability test Adams calculated point-biserial correlations for each item between the means of affirmative response group of each item and the mean score for the whole sample. All correlations were greater than .30.

In summary, Adams found that the LSIZ has reliability as a measure of life satisfaction for the elderly. He concluded that life satisfaction to aging was the one major factor associated with high scorers on the LSIZ.

For this study the LSIZ was scored according to the procedure followed by Harris and Associates, giving "2 points to each agreement with a positive statement or disagreement with a negative statement (and) 1 point...for each 'not sure' or no answer. 0 point was given for each disagreement with a positive statement or agreement with a negative statement" (Harris et al., 1975, p. 159).

Coping Inventory. A list of coping mechanisms was generated from the literature on coping and defined where necessary by the American Psychiatric Association (1975) or Dimsdale (1980b). (See Appendix F for the coping
inventory and Appendix G for their definitions). In order to determine if any of these coping mechanisms were used, broad guidelines were drawn. Any response entering, during, or leaving the concentration camp was considered a coping reaction. Thus coping, according to these general guidelines, included emotional, physical, cognitive, behavioral and perceptual responses.

Two psychology students, one an honors student from the University of Florida and one a graduate student from Florida International University, were trained by the principal investigator to code the interviews using the coping inventory. Each student studied the coping inventory which gives a discrete list of coping responses and reviewed the definitions for any coping response that was not readily apparent. Such definitions were taken verbatim from a psychiatric glossary (American Psychiatric Association, 1975) and a study of coping in the concentration camps (Dimsdale, 1980b). For purposes of instruction and demonstration, sample interviews of concentration camp survivors not included in this study were coded using the coping inventory. When each student and the principal investigator reached a level of 90% agreement of items coded, training was considered complete.

A coping mechanism was checked off on the inventory if it was reported by the subject at least once. The following interview segments (transcribed verbatim) are typical of what the raters viewed and what they were expected to score:

Mr. G:

I didn't really want to be a work detail leader. Of course I wanted the extra food — but you were also under the nose of the Nazis, if you know what I mean. It ... it really wasn't that so much extra food. I said to myself, "Well, someone's got to do it and it might as well be me." I could be a little, I thought, kinder maybe than if they pick someone else.

(The student was expected to check off the coping response of "rationalization").
Mr. J:

I suppose it was strange to be telling you but the more he hit me the less it hurt. They told me later my little fingers could be never used again. See, here. But I never felt the pain. I knew what they were doing but it didn't matter. No, they couldn't hurt me no more. I felt no pain at all at the time. Of course later — but not then, not when they were crushing my fingers.

(The student was expected to check off the coping response of "dissociation").

Mrs. R:

He stood there, this angel of death and he was so handsome as God. I can still see him — tall, with piercing blue eyes, wearing his black SS uniform and snapping a riding what-you-call-it, you have for horses, a riding stick — no whip, snapping it left, right, left, right, death, life, death, life. To this day I have never seen a man so handsome — such a stature. Those eyes, blazing with brilliance — a knowledge, an understanding I would never have. He was a god, this Doctor Mengele.

(The student was expected to check off the coping response of "idealization").

To ensure that inter-rater reliability did not fall below 90%, the raters were reexamined eight times at irregular intervals throughout the scoring process by the principal investigator.

Procedures

Pilot Study. A pilot study was undertaken during 1981 and 1982. During this time approximately 150 survivors were interviewed. While the survivors had a variety of experiences and most did not fit the subject selection criteria, their willingness to be interviewed provided refinements for a number of procedural developments. For example, it was ascertained that unlike the typical oral history procedure of obtaining a release at the close of the interview, it was necessary to obtain the release prior to the interview so that later decisions to delete critical material would not be affected. Second, while many of the survivors offered to take psychological tests, a number of these tests proved exceedingly difficult for this population because of their length, level of reading comprehension or perceived threatening content. Some of the tests
considered and then discarded included the Minnesota Multiphasic Personality Inventory, the California Personality Inventory, and the Personal Orientation Inventory.

Another problem arose when requesting participation in the pilot study. Survivors who had experience with being interviewed were usually willing to assist with further research while survivors who had never been interviewed generally refused any research involvement. It was ascertained that the interview provided, for many of the survivors, their first public willingness to be identified as a Holocaust survivor and impart information regarding their experiences. Furthermore, many of the survivors developed a rapport with the principal investigator during the interview process which ultimately furnished the necessary trust to engage in an additional undertaking.

A number of minor adjustments were also made as a result of the information provided from the pilot study. Most notably was the necessity of changing the word "test" to something more neutral. The word "test" appeared to unduly alarm the survivors. Further investigation provided some clues to this problem. The survivors generally had their education interrupted at an early age and the usual method of educational advancement, that is testing, was both unfamiliar in their developmental routine and, furthermore, elicited associations which were far removed from the testing intent of this study. For example, one survivor related an incident in which the Nazis "tested" him as fit for life by having him endure exercises which can only be described as a sadistic torture. As a result the word "test" was changed to questionnaire on the release form as well as in discussions with the survivors, or the full official title of the LSIZ was used.

The interviews themselves provided a necessary background for the development of the interview questions. It soon became apparent that although
this study was focused on the concentration camp experience, the trauma of the
events necessitated a long, slow, and thorough development of life experiences
prior to and after the concentration camp period. The quality and quantity of
recall of the concentration camp experience appeared to be closely related to
the amount of time and effort given to developing questions both before and
after this event. For that reason, 208 questions were eventually developed for
the complete interview although only 67 pertained exclusively to the
concentration camp experience. The more articulate survivors also discussed
modes of coping responses from specific events which were generally omitted
from the interviews with the less verbal survivors. In many cases the more
articulate interviewees proved to be those who had had some experience with
being interviewed and were more at ease with the process. From these
interviews, specific coping questions were developed to supplement information
on coping which might otherwise not be gleaned as a natural result of the
responses to the general questions.

The training of the interviewers demanded a rigorous schedule of at least
50 hours in addition to required readings of Holocaust and interview procedures
literature. During this time it became obvious that survivors could not interview
other survivors since there could be conflicts about the perceived "facts." Therefore it was established that only non-survivors could be interviewers.
However, the more information with which the interviewer was prepared, the
greater was the rapport and the greater the detail in response. Thus the
training was increased to at least 65 hours to cover the most salient aspects of
Holocaust history as well as interviewing skills.

The purpose of interview skills training became especially important for this
study from the point of view of standardization of technique as well as probing
for additional information. If, for example, the survivor hinted at a possible
decision or management of a situation which could provide information regarding his or her coping process, the interviewer had to be sufficiently skilled to "probe" for additional details without sacrificing either the continuity of the story or the sensitivity of the individual. The initial training for interviewing skills was conducted by the principal investigator and the Executive Vice President of the Holocaust Memorial Center. In addition, each potential interviewer was given an assignment with a non-survivor which was then reviewed with the interviewer by a psychologist from Nova University, the principal investigator, or an experienced interviewer from the Center. A second assignment followed with a survivor and a similar review and critique session.

Interviewer Training. A training program was initiated in the summer of 1980. The volunteers met approximately once a month during an eight month time span. Similar training programs were initiated in the fall of 1981 and 1982 (see Appendix H for the 1982 training syllabus) which included lectures on subjects ranging from historical information on the Holocaust to interviewing skills with older populations. In addition, the training schedule required attendance at critique sessions where volunteers could practice acquired skills under supervision.

Approximately 15 volunteers, from an initial pool of over 50 people, completed the training satisfactorily and conducted the interviews used in this study. Each volunteer interviewer did practice interviews prior to interviewing the survivors. After each interview, the interviewer's techniques were reviewed by a psychologist from Nova University, the principal investigator, or an experienced interviewer from the Center.

Pre-Interview. The formal interview was preceded by a pre-interview session at which time the study was explained in terms of the respondent's expected participation and signature on the Center's release form was obtained.
(Appendix D). The pre-interview allowed for agreement about the setting, time, date of the interview and testing session, as well as familiarization with the recording procedure.

**Formal Interview.** The formal interviews were conducted at the respondent's home or at a university/college media facility. All the interviews for the study were conducted by volunteers trained by the Holocaust Memorial Center as explained under "Interviewer Training." The total interview process took from two to six hours to complete and in some cases it was necessary to break the interview into several sessions in order to ensure completion without exhausting the subject.

**Testing.** The testing procedure fell within the following sequence of steps. First, survivors who had asked to be interviewed by the Holocaust Memorial Center were contacted and a brief personal history was taken. The Center then arranged for a pre-interview in order to explain the purpose of the interview, establish a date, time, and place for the formal interview and review the release form. The Center's release form (see Appendix D) which was signed at the time of the formal interview gave permission for the formal interview to be used for educational purposes. This permitted the researcher to include the interview in this research study. Third, the survivors gave their testimony to a trained volunteer in a formal interview using the standardized questions from the Interview Questionnaire as discussed in the section on "Instruments." Nineteen interviews were recorded on video tape and 33 on audio tape. The majority of the interviews were recorded on audio tape due to the practical considerations of having to engage video technicians and a video studio as well as the additional costs of video tapes. A letter was then sent to those interviewees who met the selection criteria (as explained under Population and Sample) inviting them to participate in this research study (see Appendix A). A
student assistant followed up the letters by telephoning each subject who resided in the local area to arrange an appointment for a testing session. Any questions that the subject might have regarding the research were answered at this time by either the student assistant or the principal investigator. The student assistant then coded the subjects by number and had each one complete the biographical data form and the LSIZ. A separate release form, composed specifically for this study (see Appendix J), was also reviewed, approved and signed by the subject during this meeting but prior to completing the biographical data form and the LSIZ. Subjects who were not available locally were also sent a letter and contacted shortly thereafter by telephone. Again, any questions which the subject might have were answered at this time by either the student assistant or the principal investigator. Instead of asking for an appointment to meet with the subject, however, it was requested that they return the research forms which were sent to them with a self-addressed envelope. This latter procedure applied to only three subjects. Each test was then scored "blind" by the principal investigator and re-scored as a accuracy check by a student assistant. The scores of the LSIZ were then compared with the results from the coping inventories as described in the following section.

**Analyses of Data**

Two students, a graduate in psychology at Florida International University and a former undergraduate honors major in psychology from the University of Florida, were trained to score the coping inventory. Inter-rater reliability was ascertained as described in the section under "coping inventory." Neither student was advised as to the specific objectives of the study until it was completed. A coping mechanism was checked off on the inventory if it was reported at least once by the survivor. A frequency count for each mechanism was not included in the final tabulation of the mechanisms. In addition, as the
LSIZ's were not identified by name, the students did not know the adjustment score of the individual whose coping mechanisms they were coding on the inventory.

The life adjustment measure (LSIZ) was scored blind by the principal investigator. To ensure accuracy, one of the student assistant's rescored each numbered, but otherwise unidentified, LSIZ. Following the procedures noted below, the principal investigator then attempted to correlate the LSIZ results with (a) the three coping styles, (b) the specific mechanism of denial and (c) the total number of mechanisms used.

To answer the research question on coping styles, it was first necessary to determine which coping mechanisms fell within each style. This selection was performed independently by three psychologists using as a basis the classification scheme of Pearlin and Schooler. Using this scheme, each coping mechanism was classified according to whether or not it represented (a) coping from social resources as represented by interaction with an interpersonal network, (b) coping from psychological resources as represented by characteristic defense operations or (c) active coping from thoughts, feelings, and behaviors. Due to an extensive difference in the resulting distribution of coping mechanisms among the style classifications, two of the style groups were combined as described under "Question One" in the following chapter. Two analyses were then performed. In the first analysis a weighted percentage of the mechanisms used in each style by each subject provided tabulation for the predominante coping style. In the second analysis a count of the absolute number of mechanisms exhibited within each style by each subject provided tabulation for the predominante coping style. The extent to which the coping styles are related to later life adjustment was evaluated in a two-tailed student t test.
To answer the second research question regarding the relative effectiveness of denial, the total subject group was divided into two groups according to whether or not denial was utilized as a coping response. The degree of difference in mean adjustment scores from the LSIZ between the denial and no-denial samples was compared through a t test.

The third research question was answered by correlating the number of coping mechanisms used by each respondent with his or her LSIZ score to determine the relationship between life adjustment and the sheer number of coping mechanisms used.
CHAPTER IV
RESULTS

Research Questions

Question One. The first research question concerned three different coping styles and the possibility that there was a difference in effectiveness among these styles as measured by present life adjustment. The first step in this analysis required the classification within a style for each of the 42 coping mechanisms which had been identified in the literature. The definitions for the coping styles and the coping mechanisms were given to three psychologists who independently made the determination for classifications. There was 100% agreement on the placement of each coping mechanism with the exception of "anticoping." Since all three psychologists differed on this one mechanism and no consensus of agreement could be reached through further discussion, this mechanism was eliminated from the analyses of this question.

The results of the classification for each coping mechanism are shown in Table 2. As may be seen, the three groups were substantially different in total number with only 3 coping mechanisms falling into the social style, 25 falling into the psychological style, and 13 falling into the active style. In light of the unequal n size and in order to adequately evaluate the research question, there were two ways to conduct the statistical analysis. Both analyses were performed as follows.

In the first analysis a conventional statistical rendering of unequal n dictated a need to weight the various mechanisms within each style in order to equalize the categories. The first step in this procedure was to drop those
Table 2
Classification of Coping Styles

<table>
<thead>
<tr>
<th>Coping Mechanism</th>
<th>Social</th>
<th>Psychological</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Anticoping - surrender to stress&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Assisting or showing concern for another</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Compensation</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4. Denial</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5. Depersonalization</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6. Differential focus on the good</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>7. Displacement</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8. Dissociation</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>9. Fantasy</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>10. Fatalism</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>11. Focus only on the past</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>12. Focus only on the present</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>13. Group affiliation</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>14. Hope</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>15. Humor</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>16. Idealization</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>17. Identification</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>18. Incorporation</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>19. Intellectualization</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>20. Introjection</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>21. Isolation</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>22. Magical thinking</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>23. Mastery (External)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>24. Mastery (Internal)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>25. Motor activity heightened</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>26. Negativism</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>27. Obedience</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>28. Overcompensation</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>29. Projection</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>30. Rationalization</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>31. Reaction formation</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>32. Rebelliousness</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>33. Receiving assistance from another</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>34. Regression</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Religious faith or beliefs</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>36. Repression/Suppression</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>37. Sublimation</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>38. Substitution</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>39. Survival for some specific purpose</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>40. Symbolization</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>41. Undoing</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>42. Will to live</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Total Number Within Style 3 25 13

<sup>a</sup>No consensus of agreement was reached for the classification of this mechanism so it was not included in the total number.
mechanisms which had not been used at all or only used by one subject. As a result, eight such mechanisms were dropped, in addition to that noted earlier of "anticoping." The eight specific mechanisms which were eliminated because they were unused or used only by one subject, are displayed at the end of Table 3 together with the frequency distribution of all other mechanisms. The omission of these eight mechanisms then produced the following total numbers within category styles: 3 social, 18 psychological, 12 active.

In addition, since the conceptual definitions from the literature for the "social" and "active" styles were similar, it appeared feasible to combine the two styles into a single category. Combining these two styles into one "social-active" group also appeared to be an appropriate methodological maneuver since a comparison of two styles, rather than three as initially proposed in the research question, would not jeopardize the essential information to be gleaned. In a like manner and for the sake of definitional accuracy, the "psychological" style was also reexamined. Since the "psychological" style consisted of defenses, this style was retitled as "psychological-defensive" in order to more clearly reflect its contextual meaning. These procedures resulted in two final coping styles, a "social-active" style and a "psychological-defensive" style.

Dropping eight mechanisms and "anticoping", together with combining styles, resulted in a difference between groups of 15 mechanisms in the "social-active" style and 18 mechanisms in the "psychological-defensive" style.

In order to determine the coping style for each subject, the next step in this first analysis method was to consider various weighting procedures to evaluate whether the coping mechanisms utilized placed the individual in a "social-active" or "psychological-defensive" style. Because of the still unequal n between coping styles, even with nine mechanisms deleted, the most
Table 3
Frequency Distribution of Coping Mechanisms
(Sample Size = 52)

<table>
<thead>
<tr>
<th>Coping Mechanism</th>
<th>n</th>
<th>Percent&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mastery (External)</td>
<td>44</td>
<td>84.6</td>
</tr>
<tr>
<td>2. Assisting or showing concern for another</td>
<td>34</td>
<td>65.4</td>
</tr>
<tr>
<td>3. Receiving assistance from another</td>
<td>34</td>
<td>65.4</td>
</tr>
<tr>
<td>4. Fatalism</td>
<td>28</td>
<td>53.8</td>
</tr>
<tr>
<td>5. Group affiliation</td>
<td>28</td>
<td>53.8</td>
</tr>
<tr>
<td>6. Differential focus on the good</td>
<td>27</td>
<td>51.9</td>
</tr>
<tr>
<td>7. Mastery (Internal)</td>
<td>27</td>
<td>51.9</td>
</tr>
<tr>
<td>8. Rationalization</td>
<td>26</td>
<td>50.0</td>
</tr>
<tr>
<td>9. Hope</td>
<td>24</td>
<td>46.2</td>
</tr>
<tr>
<td>10. Obedience</td>
<td>24</td>
<td>46.2</td>
</tr>
<tr>
<td>11. Repression/Suppression</td>
<td>22</td>
<td>42.3</td>
</tr>
<tr>
<td>12. Will to live</td>
<td>20</td>
<td>38.5</td>
</tr>
<tr>
<td>13. Depersonalization</td>
<td>18</td>
<td>34.6</td>
</tr>
<tr>
<td>14. Intellectualization</td>
<td>18</td>
<td>34.6</td>
</tr>
<tr>
<td>15. Rebelliousness</td>
<td>16</td>
<td>30.8</td>
</tr>
<tr>
<td>16. Denial</td>
<td>14</td>
<td>26.9</td>
</tr>
<tr>
<td>17. Dissociation</td>
<td>14</td>
<td>26.9</td>
</tr>
<tr>
<td>18. Humor</td>
<td>13</td>
<td>25.0</td>
</tr>
<tr>
<td>19. Anticoping - surrender to stress</td>
<td>11</td>
<td>21.2</td>
</tr>
<tr>
<td>20. Idealization</td>
<td>9</td>
<td>17.3</td>
</tr>
<tr>
<td>21. Motor activity heightened</td>
<td>9</td>
<td>17.3</td>
</tr>
<tr>
<td>22. Fantasy</td>
<td>8</td>
<td>15.4</td>
</tr>
<tr>
<td>23. Survival for some specific purpose</td>
<td>8</td>
<td>15.4</td>
</tr>
<tr>
<td>24. Compensation</td>
<td>7</td>
<td>13.5</td>
</tr>
<tr>
<td>25. Religious faith or beliefs</td>
<td>7</td>
<td>13.5</td>
</tr>
<tr>
<td>26. Focus only on the present</td>
<td>6</td>
<td>11.5</td>
</tr>
<tr>
<td>27. Identification</td>
<td>5</td>
<td>9.6</td>
</tr>
<tr>
<td>28. Negativism</td>
<td>5</td>
<td>9.6</td>
</tr>
<tr>
<td>29. Displacement</td>
<td>4</td>
<td>7.7</td>
</tr>
<tr>
<td>30. Isolation</td>
<td>4</td>
<td>7.7</td>
</tr>
<tr>
<td>31. Overcompensation</td>
<td>4</td>
<td>7.7</td>
</tr>
<tr>
<td>32. Symbolization</td>
<td>4</td>
<td>7.7</td>
</tr>
<tr>
<td>33. Regression</td>
<td>3</td>
<td>5.8</td>
</tr>
<tr>
<td>34. Substitution</td>
<td>2</td>
<td>3.8</td>
</tr>
<tr>
<td>35. Focus only on the past</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>36. Introjection</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>37. Magical thinking</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>38. Projection</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>39. Reaction formation</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>40. Sublimation</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>41. Incorporation</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>42. Undoing</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

<sup>a</sup> Percent calculated using total sample size.
parsimonious of various possible weighting procedures was selected and performed by counting the mechanisms each subject used within each style and forming a percentage with the denominator being the total number of displayed mechanisms within each style by all subjects. The greater percentage then determined the style for each subject.

In order to determine whether a significant difference in life satisfaction existed between the two coping styles, a two-tailed student t test was performed. Coping style group served as the between-subjects factor while scores on the life satisfaction index comprised the dependent measure within this analysis. In Table 4, the means and standard deviations associated with the two groups are presented. A summary of the results of the t test is shown in Table 5. As can be seen in Tables 4 and 5, a non-significant difference between the two groups was found.

For the second method of analysis evaluating the first research question, the coping mechanism groups of "active" and "social" were again combined and the "psychological" style retitled to "psychological-defensive." This was done, as per the first analysis, because the conceptual definitions of the "active" and "social" styles were similar and to clarify the contextual meaning of the "psychological" style. In addition, following the category changes effected in the first analysis would allow for consistency in interpretation of the two different analyses for the first research question.

Weighting the coping mechanisms artificially favored the "active-social" group over the "psychological-defensive" group. In order to reduce this artificial advantage, a second method of analysis categorized subjects into predominant coping style groups on the basis of the total number of mechanisms exhibited. For example, if a subject exhibited six active-social mechanisms and four psychological-defensive mechanisms, then his or her predominate style was
Table 4
Means and Standard Deviations for Life Satisfaction Associated with Coping Styles for Weighted Coping Mechanisms

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of Cases</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active-Social</td>
<td>47</td>
<td>22.38</td>
<td>7.83</td>
</tr>
<tr>
<td>Psychological-Defensive</td>
<td>5</td>
<td>18.20</td>
<td>7.89</td>
</tr>
</tbody>
</table>

Table 5
Summary of Results from T Test on Life Satisfaction Index for Coping Styles with Weighted Coping Mechanisms

<table>
<thead>
<tr>
<th>Variable</th>
<th>T Value</th>
<th>D.F.</th>
<th>2-Tail Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active-Social</td>
<td>1.14</td>
<td>50</td>
<td>.262&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Psychological-Defensive</td>
<td>1.14</td>
<td>50</td>
<td>.262&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> Not significant
active-social. In this instance, where the independent measure was unweighted, four subjects did not show a predominate style. In order to determine whether a significant difference in life satisfaction existed between the two coping style groups, a two tailed student t test was performed. Coping style group served as the between-subjects factor while scores on the Life Satisfaction Index comprised the dependent measure in this analysis. In Table 6, the means and standard deviations associated with the two groups are presented. A summary of the results of the t test is shown in Table 7. As can be seen in Tables 6 and 7, for those persons who did have a preferred style of coping, a significant difference was found with the "active-social" style associated with higher scores on the life satisfaction index.

**Question Two.** The second research question examined the specific mechanism of denial to see if those who used denial were more or less well-adjusted, as measured by current life satisfaction, than those who did not use denial. In order to evaluate this question a student t test was performed. The means and standard deviations associated with this analysis are presented in Table 8. The results of the t test are given in Table 9. As shown in Tables 8 and 9 there was no significant difference in current life satisfaction scores between those who did use denial and those who did not.

In addition to the analysis on denial, additional analyses were performed on each of the other coping mechanisms. The results of these secondary analyses of the other coping mechanisms are presented in the supplemental analyses section in this chapter.

**Question Three.** The third research question sought to compare the number of coping mechanisms an individual used while in the concentration camps and current life satisfaction. The strength of the relationship between the total number of coping mechanisms and life satisfaction was assessed by a Pearson
### Table 6

Means and Standard Deviations for Life Satisfaction Associated with Coping Styles for Unweighted Coping Mechanisms

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of Cases</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active-Social</td>
<td>41</td>
<td>22.88</td>
<td>7.88</td>
</tr>
<tr>
<td>Psychological-Defensive</td>
<td>7</td>
<td>16.71</td>
<td>6.95</td>
</tr>
</tbody>
</table>

### Table 7

Summary of Results from T Test on Life Satisfaction Index for Coping Styles with Unweighted Coping Mechanisms

<table>
<thead>
<tr>
<th>Variable</th>
<th>T Value</th>
<th>D.F.</th>
<th>2-Tail Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active-Social</td>
<td>1.94</td>
<td>46</td>
<td>.05</td>
</tr>
<tr>
<td>Psychological-Defensive</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 8

Means and Standard Deviations for Life Satisfaction Associated with Denial and Non-Denial Groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>No. of Cases</th>
<th>Life Satisfaction Index Z</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>Denial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 1</td>
<td>14</td>
<td>20.57</td>
</tr>
<tr>
<td>Group 2</td>
<td>38</td>
<td>22.50</td>
</tr>
</tbody>
</table>

Note. Group 1 used denial; Group 2 did not use denial.

Table 9

Summary of Results from T Test on Life Satisfaction Index for Denial and Non-Denial Groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>T Value</th>
<th>D.F.</th>
<th>2-Tail Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial</td>
<td>-.78</td>
<td>50</td>
<td>.44&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> Not significant
product moment correlation. The obtained correlational coefficient (r) was -0.04. This coefficient was non-significant (p = .37).

**Supplemental Analyses**

**Demographic and Holocaust Research Data.** A selected number of Holocaust research and demographic variables were investigated informally to analyze whether certain of these variables had an effect on later life adjustment. Of particular interest were those variables that differentiated survivors from the population at large, specifically on Holocaust factors.

First, since this study examined the particular situation within the Nazi classified Class II concentration camps, the sample was examined for distribution within this classification. Representation within this classification is illustrated in Table 10.

Second, a listing of the sample characteristics with regard to general Holocaust research variables is given in Table 11. Each of these variables, together with general demographic data, was examined to determine their influence on each other and on current life satisfaction. The correlational matrix comprised of these variables is presented in Table 12. The dependent variable, life satisfaction, was significantly related to length of time in the concentration camps (r = -.27, p = .02), date of arrival in the United States (r = -.28, p = .02), year of birth (r = .26, p = .03), and employment (r = .26, p = .03).

From Table 12, intercorrelations between the independent variables show that the length of time in the camps was also significantly related to the number of camps and, moreover, the number of camps was significantly related to the number of coping mechanisms the survivor used while imprisoned. In addition, male survivors were in significantly more concentration camps than their female counterparts and were incarcerated longer. Individuals who survived from
Table 10

Distribution of Sample by Nazi Classified Class II: Official "Concentration Camps"

(Sample Size = 52)

<table>
<thead>
<tr>
<th>Name of Camp</th>
<th>Number of Sample Imprisoned There</th>
<th>Name of Camp</th>
<th>Number of Sample Imprisoned There</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auschwitz/ Birkenau</td>
<td>35</td>
<td>Majdanek</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mauthausen</td>
<td>5</td>
</tr>
<tr>
<td>Buchenwald</td>
<td>8</td>
<td>Natzweiler</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neuengamme</td>
<td>1</td>
</tr>
<tr>
<td>Dachau</td>
<td>7</td>
<td></td>
<td>Ravensbruck</td>
</tr>
<tr>
<td>Dora/Nordhausen</td>
<td>1</td>
<td></td>
<td>Sachsenhausen</td>
</tr>
<tr>
<td>Flossenberg</td>
<td>-</td>
<td></td>
<td>Stutthof</td>
</tr>
</tbody>
</table>

Note. Some survivors were imprisoned in more than one concentration camp.
Table 11

Sample Characteristics of Holocaust Research Variables

(Sample Size = 52)

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>Number of Camps In Which Interned&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>Mean 3.02</td>
</tr>
<tr>
<td></td>
<td>Median 2.88</td>
</tr>
<tr>
<td></td>
<td>Range 1-7</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year Entered Camps</th>
<th>Number of Months in Camps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1943</td>
</tr>
<tr>
<td>Median</td>
<td>1943</td>
</tr>
<tr>
<td>Range</td>
<td>1938-44</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age at Time of Internment</th>
<th>Date of Arrival in U.S.A.</th>
<th>Marital Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>24.0</td>
<td>Married 40</td>
</tr>
<tr>
<td>Median</td>
<td>21.3</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>12-43</td>
<td>Spouse is Survivor 25</td>
</tr>
</tbody>
</table>

| Mean Age at Present | 64.09 |

<sup>a</sup> Includes all classifications of Nazi prison camps.
Table 12
Correlational Matrix for LSIZ Scores, Holocaust Research Variables and Demographic Variables

<table>
<thead>
<tr>
<th>LSIZ score</th>
<th>Sex</th>
<th>Yr. of birth</th>
<th>Country of origin</th>
<th>Yr. entered conc. camp</th>
<th># of camps</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSIZ score</td>
<td>***</td>
<td>.11</td>
<td>.26*</td>
<td>.04</td>
<td>-.10</td>
</tr>
<tr>
<td>Sex (M=2, F=1)</td>
<td>.11</td>
<td>***</td>
<td>.03</td>
<td>.05</td>
<td>.10</td>
</tr>
<tr>
<td>Yr. of birth</td>
<td>.26*</td>
<td>.03</td>
<td>***</td>
<td>-.07</td>
<td>-.29*</td>
</tr>
<tr>
<td>Country of origin</td>
<td>.04</td>
<td>.05</td>
<td>-.07</td>
<td>***</td>
<td>-.08</td>
</tr>
<tr>
<td>Yr. entered conc. camp</td>
<td>-.10</td>
<td>.10</td>
<td>-.29*</td>
<td>-.08</td>
<td>***</td>
</tr>
<tr>
<td># of camps</td>
<td>-.10</td>
<td>.28*</td>
<td>-.13</td>
<td>.29*</td>
<td>.02</td>
</tr>
<tr>
<td>Months in camps</td>
<td>-.27*</td>
<td>.37**</td>
<td>-.19</td>
<td>.33**</td>
<td>-.09</td>
</tr>
<tr>
<td># Cop. mech used in camps</td>
<td>-.05</td>
<td>.05</td>
<td>-.09</td>
<td>-.10</td>
<td>-.05</td>
</tr>
<tr>
<td>Child killed in Holocaust</td>
<td>-.07</td>
<td>-.02</td>
<td>-.23</td>
<td>.13</td>
<td>.34**</td>
</tr>
<tr>
<td>Date arrived in U.S.A.</td>
<td>-.28*</td>
<td>-.06</td>
<td>-.17</td>
<td>-.04</td>
<td>.03</td>
</tr>
<tr>
<td>Marital status</td>
<td>.04</td>
<td>.22</td>
<td>.16</td>
<td>.11</td>
<td>-.19</td>
</tr>
<tr>
<td>Married to survivor</td>
<td>-.16</td>
<td>-.02</td>
<td>-.22</td>
<td>.31*</td>
<td>.11</td>
</tr>
<tr>
<td># of Living Children</td>
<td>.14</td>
<td>.16</td>
<td>.01</td>
<td>.08</td>
<td>-.37**</td>
</tr>
<tr>
<td>Level of Education</td>
<td>.01</td>
<td>.01</td>
<td>.01</td>
<td>-.32*</td>
<td>.06</td>
</tr>
<tr>
<td>Present income</td>
<td>.19</td>
<td>.23</td>
<td>.16</td>
<td>-.27*</td>
<td>-.27*</td>
</tr>
<tr>
<td>Religion</td>
<td>-.02</td>
<td>.02</td>
<td>-.04</td>
<td>.18</td>
<td>.15</td>
</tr>
<tr>
<td>Religiosity</td>
<td>-.08</td>
<td>-.05</td>
<td>-.03</td>
<td>-.06</td>
<td>.09</td>
</tr>
<tr>
<td>Current employment</td>
<td>.26*</td>
<td>-.29*</td>
<td>.09</td>
<td>-.31*</td>
<td>-.34**</td>
</tr>
</tbody>
</table>

*p < .05
**p < .01
Table 12 — continued

<table>
<thead>
<tr>
<th>Months in conc. camps</th>
<th># Cop. mech used in camps</th>
<th>Child killed in Holocaust</th>
<th>Date arrived in U.S.A.</th>
<th>Marital status</th>
<th>Married survivor</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSI2 score</td>
<td>-.27*</td>
<td>-.05</td>
<td>-.07</td>
<td>-.28*</td>
<td>.04</td>
</tr>
<tr>
<td>Sex (M=2, F=1)</td>
<td>.37**</td>
<td>.05</td>
<td>-.02</td>
<td>-.06</td>
<td>.22</td>
</tr>
<tr>
<td>Yr. of birth</td>
<td>-.19</td>
<td>-.09</td>
<td>-.23</td>
<td>-.17</td>
<td>.16</td>
</tr>
<tr>
<td>Country of origin</td>
<td>.33**</td>
<td>-.10</td>
<td>.13</td>
<td>-.04</td>
<td>.11</td>
</tr>
<tr>
<td>Yr. entered conc. camp</td>
<td>-.09</td>
<td>-.05</td>
<td>.34**</td>
<td>.03</td>
<td>-.19</td>
</tr>
<tr>
<td># of camps</td>
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<td>.31*</td>
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<tr>
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<td>***</td>
<td>-.03</td>
<td>-.04</td>
<td>.18</td>
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</tr>
<tr>
<td># Cop. mech used in camps</td>
<td>-.03</td>
<td>***</td>
<td>-.02</td>
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<td>-.10</td>
</tr>
<tr>
<td>Child killed in Holocaust</td>
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<td>-.02</td>
<td>***</td>
<td>.24*</td>
<td>-.09</td>
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<td>-.11</td>
<td>.24*</td>
<td>***</td>
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</tr>
<tr>
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<td>-.09</td>
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</tr>
<tr>
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<td>.14</td>
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<td>.29*</td>
</tr>
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<tr>
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<td>.10</td>
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<td>.16</td>
<td>.08</td>
<td>.06</td>
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</tr>
<tr>
<td>Religiosity</td>
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<td>.07</td>
<td>-.19</td>
<td>-.10</td>
<td>-.04</td>
</tr>
<tr>
<td>Current employment</td>
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<td>-.11</td>
<td>-.28*</td>
<td>-.09</td>
<td>.07</td>
</tr>
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</table>

*p < .05  
**p < .01
Table 12 — continued

<table>
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<tr>
<th></th>
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<th>Level of education</th>
<th>Present income</th>
<th>Religion</th>
<th>Religiosity</th>
<th>Current employment</th>
</tr>
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<td>.19</td>
<td>-.02</td>
<td>-.08</td>
<td>.26*</td>
</tr>
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<td>Sex (M=2, F=1)</td>
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<td>.01</td>
<td>.23</td>
<td>.02</td>
<td>-.05</td>
<td>-.29*</td>
</tr>
<tr>
<td>Yr. of birth</td>
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<td>.01</td>
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<td>.09</td>
</tr>
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<td>-.31*</td>
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<td>-.34**</td>
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<td>.04</td>
<td>.21</td>
<td>.14</td>
<td>-.08</td>
<td>-.16</td>
</tr>
<tr>
<td>Months in camps</td>
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<td>-.07</td>
<td>-.04</td>
<td>-.04</td>
<td>-.03</td>
<td>-.19</td>
</tr>
<tr>
<td># Cop. mech used in camps</td>
<td>.01</td>
<td>.11</td>
<td>.36**</td>
<td>.16</td>
<td>.07</td>
<td>-.11</td>
</tr>
<tr>
<td>Child killed in Holocaust</td>
<td>-.20</td>
<td>-.25*</td>
<td>-.18</td>
<td>.08</td>
<td>-.19</td>
<td>-.28*</td>
</tr>
<tr>
<td>Date arrived in U.S.A.</td>
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<td>-.12</td>
<td>-.04</td>
<td>.06</td>
<td>-.10</td>
<td>-.09</td>
</tr>
<tr>
<td>Marital status</td>
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<td>-.05</td>
<td>.32*</td>
<td>.20</td>
<td>-.04</td>
<td>.07</td>
</tr>
<tr>
<td>Married to survivor</td>
<td>.05</td>
<td>-.22</td>
<td>-.02</td>
<td>.30*</td>
<td>.13</td>
<td>-.30*</td>
</tr>
<tr>
<td># of Living Children</td>
<td>***</td>
<td>-.18</td>
<td>.23</td>
<td>.32*</td>
<td>.15</td>
<td>.13</td>
</tr>
<tr>
<td>Level of Education</td>
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<td>***</td>
<td>.28*</td>
<td>-.38**</td>
<td>.03</td>
<td>.21</td>
</tr>
<tr>
<td>Present income</td>
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<td>.28*</td>
<td>***</td>
<td>.18</td>
<td>.18</td>
<td>.31*</td>
</tr>
<tr>
<td>Religion</td>
<td>.32*</td>
<td>-.38**</td>
<td>.18</td>
<td>***</td>
<td>.11</td>
<td>-.10</td>
</tr>
<tr>
<td>Religiosity</td>
<td>.15</td>
<td>-.03</td>
<td>.18</td>
<td>.11</td>
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<td>.14</td>
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<tr>
<td>Current employment</td>
<td>.13</td>
<td>.21</td>
<td>.31*</td>
<td>-.10</td>
<td>.14</td>
<td>***</td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01
eastern Europe also were in more concentration camps and were incarcerated longer than were survivors from western Europe.

The date of arrival in the United States was significantly related to only one of the other independent variables, loss of a child in the Holocaust. The later the year in which the survivor came to the United States, the greater was the probability that he or she had lost a child in the Holocaust.

The year of birth was also significantly related to loss of child. The older the survivor, the greater was the probability that they had lost a child in the Holocaust. In addition, the year of birth was related to the year the survivor entered the concentration camp with younger survivors having entered the camps at an earlier date than older survivors.

Current employment was positively and significantly associated with present income. An inverse correlation showed that males are significantly less employed today than women. Other significant correlations with current employment were also negative showing less employment today for survivors who had gone into the camps earlier, had lost a child in the Holocaust, or married another survivor. (Marriage to another survivor was also significantly associated with those survivors who had been in more concentration camps or were from eastern Europe). Survivors from eastern European counties are significantly less employed today and reported lower annual incomes, but they also had less education as compared with those who came from western Europe.

Finally, and again with respect to differentiating the Holocaust sample from the population at large, Table 13 shows the comparison between the LSIZ scores of the survivors and those published by Harris and Associates (1975). The survivors scored below the total public as did the older general population and somewhat below those in the general population over age 64. The latter difference, however, is not significant ($X^2 = 6.60$, df = 7, $p > .10$) and may be
### Table 13

Life Satisfaction Index Scores

<table>
<thead>
<tr>
<th>Score</th>
<th>General Public&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Survivors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Public</td>
<td>64 and over</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-6</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>7-9</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>10-12</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>13-15</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>16-18</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>19-21</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>22-24</td>
<td>12</td>
<td>12</td>
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<td>25-27</td>
<td>13</td>
<td>15</td>
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<td>28-30</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>31-33</td>
<td>19</td>
<td>11</td>
</tr>
<tr>
<td>34-36</td>
<td>16</td>
<td>10</td>
</tr>
</tbody>
</table>

| Mean  | 26.4 | 24.4 | 21.98 |
| Median | 28.0 | 26.0 | 23.50 |

<sup>a</sup> Harris et al., 1975.
accounted for by a difference in interpretation of the LSIZ questions by the survivors. This issue is taken up for discussion in the following chapter.

**Coping Mechanisms.** Few of the coping mechanisms differentiated the well-adjusted and less well-adjusted groups (see Appendix K). Two of the mechanisms, however, were significant: fantasy ($t = 2.36, p = .02$), and focus only on the present ($t = 2.12, p = .03$). Due to lack of representation in the categories, significant associations are not reported here for those coping mechanisms used only once or not at all.
CHAPTER V
DISCUSSION

Research Question Conclusions

The results of this study support the possibility that individuals who chose specific coping mechanisms (out of the possible universe of coping mechanisms reflected in this study by an unweighted statistical analysis) within a consciously active and socially interpersonal style, may fare better with respect to long term adjustment than individuals who respond to stress in a defensive manner. However, this result is tempered by the finding that a weighted analysis of the same coping mechanisms did not show a significant difference in styles. In addition, in both analyses, the lack of a sufficiently large difference in sample size between the well-adjusted and less well-adjusted groups places some concern in terms of a valid interpretation of the results. But the results do indicate a systematic difference between the two groups using the LSIZ as the criterion of categorizing the sample. In other words, even though the results failed to reach conventional significance values, there is a possibility that there is an actual difference between the two groups because of the nature of the relationship between power and significance. However, because of a limited sample size this possibility could not be verified by the present research.

With respect to the specific coping mechanism of denial, the study failed to show any difference in current life satisfaction between those who used denial and those who did not. This lack of differentiation may explain the conflicted findings regarding denial in previous studies of extremely stressful circumstances (e.g., Dembo et al., 1956 vs Visotsky et al., 1961). Theoretically
while denial is generally viewed as a maladaptive response, in reality it may serve a productive and functional purpose for one person yet be detrimental for another, with the difference in effectiveness possibly depending on other factors such as the timing of deployment or the situational consequences of this type of response.

The number of coping mechanisms employed also did not appear to differentiate persons on current life satisfaction. This finding was unexpected, especially as both the literature (Hamburg & Adams, 1967; Shneidman, 1973; Weisman, 1976) and logical assumption (Smitsen, 1976) presume that flexibility is an important aspect of adaptability and that the latter is intrinsically tied to adjustment. The fact that this study focused on a Holocaust experience which, compared even to other studies of extremely stressful experiences, is outside the pale of those parameters, may account for this finding.

Exploratory Data

Since existence in a Nazi concentration camp cannot be isolated as a single variable in stress but must be considered as an experience containing a range of individual and cumulative factors, any findings must be considered incomplete without consideration of some of the other variables that comprise this complex phenomenon. Therefore, in addition to exploring the possible additive dimension of the usual research variables of demographic data, specific information regarding the Holocaust experience of concentration camp survivors was also examined in supplemental analyses of exploratory data.

Significant Findings. With regard to differences in life satisfaction among persons who chose an "active-social" style over a "psychological-defensive" style, months in the concentration camps, which was the one Holocaust variable which significantly related to life adjustment, was examined as a covariate. The results as shown in Table 14 indicate that in the significant findings of an
Table 14

Analysis of Covariance of Life Satisfaction by Coping Styles with Length of Time (in months) in the Concentration Camps

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance of F</th>
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<td>1</td>
<td>159.842</td>
<td>2.749</td>
<td>.104</td>
</tr>
<tr>
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<td>1</td>
<td>159.842</td>
<td>2.749</td>
<td>.104</td>
</tr>
<tr>
<td>Main Effects</td>
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<tr>
<td>Coping Style</td>
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<td>226.767</td>
<td>3.900</td>
<td>.054</td>
</tr>
<tr>
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<td>1</td>
<td>226.767</td>
<td>3.900</td>
<td>.054</td>
</tr>
<tr>
<td>Explained</td>
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<td>2</td>
<td>193.305</td>
<td>3.325</td>
<td>.045</td>
</tr>
<tr>
<td>Residual</td>
<td>2616.370</td>
<td>45</td>
<td>58.142</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3002.979</td>
<td>47</td>
<td>63.893</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note  Sample size = 52. Four cases did not show a preferred coping style.
unweighted analysis of coping styles, the number of months in the camps is not a major factor in understanding the relationship between coping style selection and later life satisfaction.

Since the classification of coping styles was an artificial construction, each coping mechanism was examined as a separate variable to examine its relative contribution to life satisfaction. To determine if these differences were significant a series of t tests were run. The results are listed in Appendix K. Two of the mechanisms, fantasy and focus on the present, did significantly differentiate the well-adjusted and less well-adjusted groups. However, the fantasies reported in the survivors testimonies were, almost without exception, concerned with food. Given the state of starvation of the concentration camp prisoners, the choice of this coping mechanism may be subservient to the particular form which this mechanism depicted. That is, given the fantasy of food which this mechanism signified by almost all who evidenced it, the mechanism per se may not be psychological but an artifact of the physiological state of starvation. The other mechanism, focus on the present, which significantly related to life satisfaction, is not limited by the above consideration. Survivors who reported this mechanism related that they lived, not from day to day, but from moment to moment. They concentrated on small, immediate acts of accomplishment, on the details of their existence, on specifics rather than generalities. Such an exclusive focus may have allowed them not to become overwhelmed by the horror in which they were immersed. Regardless of interpretation, however, keeping a focus on the present did appear as a mechanism with far reaching consequences in that its usage during a period of extreme stress almost 40 years ago still is felt in a significant relationship with life satisfaction today.
In general, survivors from eastern European countries appeared to bear the brunt of difficulties both as expressed in this study's Holocaust research variables as well as in present socio-economic, educational variables. Compared to survivors from western European countries, east Europeans suffered significantly greater the loss of a child in the Holocaust, had been in significantly more concentration camps and for an overall longer period of time. They are less employed today with less income, but they also had less formal education which may be a mediating factor especially since the latter relationship was also significant.

Of the significant demographic and Holocaust research variables associated with the dependent variable, three were reasonable and could be anticipated, but one stood out with surprising force and serious implications. The three expected variables found to be associated with life satisfaction were the date of arrival to the United States, year of birth and current employment.

With regard to the two former variables, it is readily understandable that, given the setting for the odious experience of the Holocaust, the sooner one could leave the setting of that event the better they might feel today. Survivors who came earlier to this country also had more time for acculturation and assimilation, factors which could account for a difference in life satisfaction today.

Expected also was the finding that younger survivors are more satisfied with their lives today than their older counterparts which supports previous findings that general life satisfaction declines with age (Harris & Associates, 1975). Greater life satisfaction for the younger survivor in this study may reflect a number of variables including those proposed earlier in both the "statement of the problem" and "need for the study" sections of Chapter I and developed later in the literature review which discuss the decrements in
resources as one ages. This finding points out the possibility that persons who were younger when they went into the camps had more resiliency and hence more resources and flexibility than their older counterparts. Also considered in this finding is the possibility that when one is younger, the magnitude of events is not as impactful in meaning and is thus more readily diminished over time. In other words, time may act to heal the harshness of young memories in a way that may not be as effective for the older cohort.

Current employment was significantly and positively associated with life satisfaction a finding which supports the research of Harris and Associates (1975) and, as one might expect, current employment was also related to income in a positive direction.

The unexpected finding, and perhaps the most important one in this study outside of the formal analyses, is that the number of months spent in the camps was highly associated with current life satisfaction. At first glance, and compared to the other independent variables which were similar in strength of association with life satisfaction, such as current employment, this might not seem as critical a variable. But one must recall that the time spent in the concentration camps was almost 40 years ago. That the impact from this variable is still felt today is a finding that warrants serious review.

The first step in this review was an examination of the relationship between time spent in the concentration camps and the other Holocaust and demographic variables to see if there were other interactions. As noted previously, the different possible associations showed that men were imprisoned longer than women, as were survivors from Eastern Europe (as opposed to western Europe). However, another relationship also appeared which is both curious and complex in its implications. As one would expect, the longer someone was in the camps, the greater was the possibility that they were in
more camps. One would assume now that in order to survive well the changing circumstances of being moved from one camp to another, it would seem imperative to have a highly flexible coping repertoire. The results statistically support this premise finding a significant positive association between the number of camps and the number of coping mechanisms used. One then would also assume, given the strong positive linear association between the number of camps and length of time in camps, that the assumption for an expanded coping repertoire would also hold for the length of time. Yet, according to the results in this study, such may not be the case. The relationship between length of time in the camps and the number of coping mechanisms was not significant.

In an effort to understand these complex relationships, the statistically significant associations were translated into their verbal equivalents. A reasonable progression evolved as follows: the greater the number of coping mechanisms used, the greater the number of camps the survivors were in; the greater the number of camps, the more time they were imprisoned; the more time they were imprisoned, the less satisfied they are in life today. (Based on the statistics underlying this verbal evaluation, the intent of these statements cannot of course be directional, but were set up rather to follow a pattern of logical order). As a final test, the reverse of the progression should also hold true so that the fewer mechanisms used, the more satisfied they are today. Indeed, there is also a non-significant but inverse relationship between the number of coping mechanisms used and the LSI%. If this progression is correct then we do not have an answer; rather the progression presents a contradiction. While apparently logical, it is not meaningful. One possible answer is that the number of coping mechanisms is related to the length of time in the camps, but the relationship is not a linear one. Another possibility is that another variable, not examined in this study, is effecting this relationship. The answer will have
to await future investigations. Ultimately, however, it would appear from the findings in this study that the key factor for the survivors in their life satisfaction today, is not at all related to the number of coping mechanisms they used while imprisoned.

In summarizing the total scope of the significant findings, one conclusion emerges. While none of the Holocaust variables may have been as important as the style of coping, the length of time spent in the camps cannot be underestimated in terms of its impact on life satisfaction today and the element of time as a critical variable in stress may have far reaching consequences and serious implications.

**Exploratory Findings.** Four defenses appeared to have a potentially negative influence on later life satisfaction. While the levels of these defenses did not reach significance, in the overall scheme of 42 mechanisms, they were substantially more related to life satisfaction than most of the others. For this reason they are considered separately. These defenses were fatalism, isolation, negativism, and regression as shown in Appendix K. Each showed a marginal relationship with life satisfaction in the negative direction. Taking these mechanisms out of context, it could be judged that they support the analytical literature that defenses are maladaptive responses. However, it will be recalled that the defense of fantasy had a significant and positive relationship with life satisfaction and displacement also showed a marginally positive association thus negating any blanket statement one can make regarding all defense mechanisms. In addition, one active mechanism, heightened motor activity, was marginally associated with life satisfaction in a negative direction. With respect to the latter mechanism, and given the depleted physical state of the concentration camp prisoner, it is reasonable to assume that any extra exertion might have had severe, even life threatening consequences.
Limitations of the Study

Sample Limitations. This study selected its sample from survivors who had agreed to be interviewed by the Southeastern Florida Holocaust Memorial Center. There are two obvious limitations with such a selection. First, it was not possible, by virtue of the definition of Holocaust "survivor" to compare this sample against a control group of "non-survivors." Second, since many survivors still are not able to talk about their experiences during the Holocaust, this sample reflected only those who could speak about it. Given the counseling theoretic that talking about difficult life circumstances may assist people in their adjustment (Jourard, 1976), such a sampling infers that the subjects were already skewed towards the positive pole in the mental health spectrum. This does not diminish the results of the study since the objective was to gather information about healthy survivors, but it does pose the possibility that the many survivors who still cannot speak of their experiences may have used very different modes to cope with the stresses of the concentration camp experience. It must be taken into consideration that a comparison of this sample with survivors who cannot speak of their Holocaust experiences may very well have yielded different results.

In another vein, it was previously noted that there was not a large difference in sample size between the well-adjusted and less well-adjusted groups. However because of the nature of the relationship between power and significance there may be a greater difference than that which emerged based on a sample size of 52. This means that if the standard deviations remained similar between the two groups, a larger sample size would have produced a stronger level of significance. This consideration is true for each of the methods of analyses and bolsters confidence in the probability that the significance levels attained by each method underrepresent the true value of
the difference. The accuracy of this prediction, however, can only be verified in future research with a larger sample size and the lack of size differentiation between the well-adjusted and less well-adjusted groups remains a limitation for this study.

**Procedures.** A second limitation concerns the method of data collection. In this study the data were collected through interviews and testing. Interviews pose many problems, both subjective and objective. For example, it is possible to question the accuracy of recall involved, especially with respect to events which happened so many years ago. However, clinicians who work with Holocaust survivors find that there is "no amnesia for the period of persecution" (Berger, 1977, p. 204). Even in recall of other major life events with non-Holocaust populations, Casey et al. (1967), in examining retrospectively the recall of life events for yearly intervals over a ten-year span concluded that time may not affect the consistency of recall.

An additional consideration in accepting the validity of recall is the degree of concordance with past research. The details from many of these interviews, even with respect to obscure historical incidents of the period, tend to repeatedly verify the accuracy of survivors' testimonies regardless of the historical time lapse.

Nevertheless, distortion is a prime variable for consideration in this type of investigation and any findings based on such a data base must necessarily be more limited than other more objective forms of analyses.

A second limitation arises from the question of objectivity versus subjectivity in the coding of the interviews. The interviews were used to detect various coping mechanisms and the lack of an objective analysis of the excerpts cannot be estimated without replications of the methodology by other researchers. However, since the key to the analyses of this study rests with the
accuracy with which the researcher and student assistants were able to appropriately match a testimony against the coping mechanisms exhibited, a complete listing of the 42 coping mechanisms used in this study together with arbitrarily selected examples of the testimonial excerpts to which they were attributed is given in Appendix L.

**Generalizability of the Findings.** Finally, the extent to which these findings may be generalized is limited. It really is not possible to compare the experience within a Nazi concentration camp to any other "stress." The multitude of unimaginable horrors that surrounded this experience or preceded it, and sometimes even followed it, are incomprehensible to someone who has not lived through the Holocaust. If this is clearly understood, then a comparison can be tentatively approached through another direction. That is, while the Holocaust experience in a concentration camp is incomparable, the reactions of each person who suffered differed according to the resources each person brought to the experience, and these reactions are comparable (Benner et al., 1980). For that reason a study of coping responses was conducted on the premise that implications for the findings might be relevant for other groups and the group selected for this parallel was the older population.

**Implications for the Elderly**

The threshold of stress in later life may be diminished by the effects of previous, present, and cumulative major changes. The elderly are generally considered to be in a more vulnerable position than their younger counterparts due to both the physical deterioration which aging brings and the natural psycho-social losses which aging implies. Three specific results emerged from this study which would appear to have strong implications for enriching the resources which an older individual might bring to bear during stressful circumstances. First, since the number of coping mechanisms used did not
appear to have a significant influence on life satisfaction, it refocuses attention on the value of the specific mechanisms utilized. It may very well be that a large coping repertoire is of far less importance than the mechanisms in that repertoire.

This study showed that focus on the present was an effective mode of coping with extreme stress. Therapists, for example, might do well to encourage the older person to concentrate on what can be done now rather than to make plans for the future or reminisce about the past. For, in contrast to previous studies which found that thoughts of past achievements were helpful (Peterson, 1980), this study found that such a mechanism did not make an appreciable difference in life satisfaction. It was the ability to concentrate on the moment that made a future possible for the survivor. It may be no different for the older person.

Overall, defenses (including a defensive style of responding) appeared to have a relatively negative value in terms of their association with later life satisfaction. Of these mechanisms, the negative potential of fatalism was particularly prominent. If further studies replicate this finding with a greater degree of confidence, then the ability of older people to reject a fatalistic attitude and become an active participant in their destiny may be an important buffer against the impact of stress. Such a response may also be easier to effect given a strong interpersonal network. However, a social style in this study was comprised not only of receiving assistance but of giving it as well. That is, it might be of considerable benefit for the older person to not only accept help, but to assist and affiliate with others.

In summary, older people should be encouraged to share their lives with others, to seek help and render it, to be active participants in their decisions and social lives. For many older people the compounded experiences which every
life contains as it goes on may become diffused. It appears important that the individual focus on his life now, not as it was nor as he might wish it to be at some future point. Survivors have demonstrated that all the mechanisms discussed in this section may have determined the satisfaction they feel today in their own survival. Ultimately, the sharing of resources and activities together with the proper utilization of the other mechanisms noted here or earlier in the findings may be of critical value to older people in the quality of their own survival.

Finally, as revealed in supplemental analyses, the element of time may be a major determinant in the outcome of a stressful interaction. Consequently, quick intervention here is not only recommended but may very well be, in addition to coping style, one of the most important factors in deciding the relationship between stress and outcome.

Recommendations for Future Research.

It was anticipated at the onset of this study that the greatest problem would be engaging the survivors in a research study. Group studies of survivors noted excessive difficulties in this regard and it was not unusual to read studies where 75% of the survivors approached refused to participate (Cordell, 1980). While most of the survivors in this study exhibited marked apprehension, only three of the 70 people initially approached refused participation. Two reasons for this high affirmation rate seem relevant and are mentioned here to assist further studies of survivors. In the first instance, all the survivors were connected to the Southeastern Florida Holocaust Memorial Center. This Center enjoys a reputation for the highest standards of excellence in administration and programs. Survivors felt assured that their confidentiality would be preserved not because the researcher showed them an academic "human subjects release form" but because the researcher was also connected with the Center. A second
reason may be found in the slow, methodical and personal contact given to the sample. Each person selected in the sample was sent a letter which detailed the objective of the study and requested his or her inclusion. A letter rather than a phone call from the researcher gave the invited participants time to understand the request and privacy in which to consider it.

Approximately one week after the letter was sent a student assistant or the researcher called each person with an offer first to answer any questions they might have, and then to arrange an appointment at a time and place convenient for the subject rather than the researcher. For those survivors known to the researcher, there were no further problems in completing the research materials. However, for subjects who were not personally acquainted with the researcher, the student assistant reported that in her initial meeting with these individuals, almost every one of them was apprehensive about the task at hand (Potter, Note 6). For example, in spite of the fact that the student assistant had set a definite time for the meeting, it was reported that many of the survivors had anguished over the appointment. Many of them had not been able to sleep prior to the meeting, or showed signs of nervousness. Yet almost every survivor contacted participated in this study.

In reviewing the evaluations of the meetings with the survivors, one variable seemed to separate this study from the others which had disappointing attrition in their subject selections. The difference was that both the researcher and the student assistant took as many hours as were necessary to talk with the subject, to assure them of the authenticity of the study, its methods, its objectives and implications. Every survivor in this study was acutely aware of the value of his or her participation either through a personal relationship with the researcher or, more often, because each subject was approached with utmost consideration and sensitivity. This is not to say that
other Holocaust researchers have not been sensitive to their subjects, rather that they may not have fully recognized that many of the survivors cannot dispassionately sever the Holocaust experience from an academic study, even one which ostensibly had to do with present day life satisfaction. The survivors knew why they had been chosen. Regardless of the methods or objectives, the researcher was conducting a study on Holocaust survivors. To recall any moment of this experience was an agony for many of them and their commitment to persevere in the face of this personal pain is a tribute to their conviction that the world must not forget and their willingness, regardless of the personal cost, to help in this educational process. In fact, it should be mentioned that at the conclusion of the data collection, when letters of thanks were sent out to the survivors, the researcher received a number of phone calls from the subjects expressing their deepest appreciation that studies such as this were being done, that there were people still concerned and working to bring this storehouse of information which the survivors held, to the attention of others.

The second recommendation concerns the methodological problems which this study encountered. The first research question concerned the grouping of coping mechanisms into styles of coping. This grouping was based on a previously constructed classification system noted in the literature (Pearlin & Schooler, 1978). It may be that our knowledge of coping is as yet too limited to be categorized along theoretical dimensions. In retrospect it would have been better to accept a previously researched classification system such as that proposed by Lazarus (1976b) or, since this was an exploratory study, to accept the coping mechanisms as given and factor analyze them into any naturally occurring clusters. Either of these recommendations for classification could have substantially reduced the statistical complications which this study encountered.
The third recommendation concerns the analysis of the coping mechanisms. Given that this study revealed differences in the frequency with which different mechanisms are used, future research might continue where this study leaves off by comparing the most frequently used mechanisms with Holocaust research and demographic variables. Coping is a complex process and the examination of its relationship with other variables besides current life satisfaction would be a logical "next step" to further our understanding of this intricate response.

The fourth recommendation concerns the Life Satisfaction Index which was used in the data collection. While the LSIZ may be a perfectly appropriate test for the general population, the scoring for persons who have experienced extreme stress needs to be altered. A few of the questions for Holocaust survivors proved inappropriate. For example, the intention of the question: "I would not change my past life even if I could" is to answer in the affirmative for a point scored in the positive direction. Yet it is difficult for a Holocaust survivor to answer such a question in the affirmative. This concern about the questions came to light shortly after the testing session was undertaken so that in addition to asking the standard LSIZ questions, approximately two-thirds of the sample were asked the additional question of whether or not they took into consideration their personal experiences in the Holocaust as they answered the questions on the LSIZ. Most of the people said that they did and these scores then are probably deflated. In defense of the test, however, is the position that the better adjusted survivors might be more satisfied with their lives today because they do not dwell on thoughts of the Holocaust. This is still a difficult position, however, from the point of view of this study since, once again, the survivors knew exactly why they were being contacted. As a result it was almost pre-determined that the subjects would think about the Holocaust while
responding to questions on current life satisfaction while under different conditions they might not have done so.

Even given that the survivors' scores on the LSIZ may have been deflated, however, there was still only a modest difference between this group and the general older population thus supporting the findings of Weinfield et al. (1981). Weinfield, who found insignificant differences on economic and political satisfaction, social segregation, and economic achievement, among other factors, between a random sample of survivors and immigrant controls, concluded that similar findings "may provide a useful corrective to popular, clinically derived impressions of survivors, and now evidently their children (Epstein, 1979), prevalent in parts of the therapeutic communities, as suffering from incapacitating or harmful neuroses, or worse" (p. 14). He suggests, as does the present study, that "research might shift to the study of the adaptive or rehabilitative processes at work" (p. 14).

Nevertheless, it might be questioned as to why we should continue to conduct research specifically with Holocaust survivors. Within another generation most of the survivors will be gone and we would like to think that what they experienced can never be repeated. But the Holocaust survivors learned something that we must now confront and prepare to prevent. In an advanced technological society, at the highest levels, a plan was implemented to annihilate an entire population, not because of what they did, but because of who they were. The younger generation can do nothing to change the past, but to paraphrase Santayana, we must learn from the past so as not to repeat it in the future. For this researcher too much attention has been given to the tragic results of the Holocaust and not enough attention has been given to the extraordinary contribution many of the survivors have made in resurrecting their lives in spite of what they had been through. If one is a humanist it is neither
sensible nor ethical to consider only the makings of pathology without considering the pathway to health. The contents of each survivor's story contains elements of both. It is now time to consider each story for its positive as well as its negative value, record it, and pass it on.

Each survivor who can tell us of his past warns us of our future. But, at the same time, each voice carries more than a remembrance of pain, dehumanization, and horror. Each tale arises from an individual defamed and marked for destruction. But, most important, the voice exists — the story will go on — and each one contains the glory of a people restored and regaining their dignity.

Each word reminds us, again and again, that as long as there is someone to tell the story there is life.

And as long as there is someone to listen ... there is hope.
Mr. John X.
(Street)
(City)

Dear Mr. X.: 

Through my affiliation with the Southeastern Florida Holocaust Memorial Center, it has been my privilege to speak with many survivors over the past few years. However, I am contacting you at this time for a personal project. As some of you may know, in addition to my duties at the Center, I am also a graduate student at the University of Florida where I am studying for a doctorate.

To finish my degree I am working on a special research project and your assistance would be a great help to me. You have much to tell us. You have survived the most horrifying experience imaginable. With your permission, I should like to use the interview you gave to the Center in my study.

I would also like to ask you a few questions regarding your life now. These additional questions can be answered at your convenience in approximately 15 minutes.

If you agree to be in my study, your name will not be used and no identifying materials will be included unless you specify otherwise.

I or my assistant, Ms. Joanne Potter, will call to answer any questions you may have regarding this study and to request your participation. Please be assured that this study in no way affects your participation or membership at the Center.

Sincerely,

Patricia A. Lutwack
APPENDIX B
THE SOUTHEASTERN FLORIDA HOLOCAUST MEMORIAL CENTER, INC.
SURVIVOR'S HISTORY FORM

Contact Date: ___________ Referred by: ___________

NAME __________________________ Phone ______________
(LAST) (First) (Maiden Name, if applicable)

ADDRESS ____________________________________________

DATE OF BIRTH ___________ PLACE OF BIRTH ___________

ANY OTHER NAME USED (During the Hitler era) __________________________________________

PLACE OF RESIDENCE JUST PRIOR TO WAR __________________________________________

DURING THE WAR:

EGHETTO From _______ To _______

CONCENTRATION CAMPS From _______ To _______
1. __________________________________________
2. __________________________________________
3. __________________________________________
4. __________________________________________

Use additional sheet of paper if necessary)

UNDERGROUND From _______ To _______

HIDING PLACE From _______ To _______

DISPLACED PERSONS CAMP From _______ To _______

PLACE OF RESIDENCE JUST AFTER WAR From _______ To _______

DATE OF ARRIVAL IN U.S.A. ___________ FIRST PLACE OF RESIDENCE ___________

DO YOU HAVE ANY DOCUMENTS, PHOTOS, ETC. WHICH YOU WISH TO BRING TO THE
INTERVIEW? YES____ NO_____ TYPE (e.g., photos) ______________________

HAVE YOU EVER BEEN INTERVIEWED? YES____ NO_____ PLACE ______________________

Questioner __________________________________________

Assigned to: ___________________________ Date _______
APPENDIX C
BIOGRAPHICAL FORM

The following questions have been designed to help us compare the backgrounds of all the persons who have volunteered to participate in this study. It is not necessary to put your name on the paper. It would be appreciated if you would answer each question. Please print your responses.

1. In what country were you born?

2. What is your date of birth?
   ________________
   Month/Day/Year

3. What was your father's occupation while you were growing up?

4. What was your mother's occupation while you were growing up?

5. Are you currently: (Please check one response)
   __________________________
   employed
   unemployed
   retired
   homemaker

6. If employed, what is your occupation?

   __________________________

   If unemployed or retired, what was your occupation?

   __________________________

7. What was your total (family) income before taxes last year? (Include pensions and social security):

   a. under $5,000                e. $20,000 - 24,999
   b. $5,000 - 9,999              f. $25,000 - 34,999
   c. $10,000 - 14,999            g. $35,000 - 49,999
   d. $15,000 - 19,999            h. $50,000 and over
8. What is your marital status?

- single
- married
- separated
- divorced
- widowed

9. If married, is your spouse a survivor?

- yes
- no

10. If married, what is your spouse's occupation?


11. How many children have you had?


12. Please give the ages of living children from oldest to youngest:


13. Which, if any, religion do you practice?


14. If you practice a religion, how often do you attend church or synagogue? (Please check responses in more than one column, if appropriate):

- one or more times a week
- high holidays
- once a month
- occasionally throughout year
- two or three times a month
- never

15. What was the highest level of education you completed?


Additional comments:
(Please feel free to use this space to clarify any responses)


Thank you!
(While the formal interview with survivors allowed for open-ended responses, the questions were structured so as to cover several major areas in the survivors' life history. A sample of the areas covered and the type of questions asked are given below. The questions were based both on the objectives of the dissertation as well as previous research efforts with questionnaires including those of the Wiener Oral History Museum and the Yad Vashem Research Institute, both of which have interviewed survivors of this era extensively).

I. PRE-WAR

A. General/Sociological Background

1. In what large city or town and country did you grow up?
2. What was the major industry in your town (city, village)?
3. etc.

B. Family/Personal

1. How did your parents earn their living?
2. What types of schools did you attend?
3. etc.

C. Community Reactions to Hitler Onslaught

1. During the pre-war years, what did you hear about what was happening in Germany?
2. What changes occurred in your town as Hitler started to gain power in Europe?
3. etc.

II. WAR YEARS: OCCUPATION BY THE NAZIS

1. What happened in your town between the time the war started and the Nazi occupation?
2. Where were you living when the war broke out?
3. etc.

III. WAR YEARS: GHETTO

A. General/Sociological Background

1. How did you learn that you had to live in the ghetto?
2. What ghetto were you in? (Please spell name).
B. Personal Family Life

1. What work did you do?
2. How long was your family able to remain together in the ghetto?
   (If separated: For what reason?)
3. etc.

C. Deportation from the Ghetto

1. Where did you gather for deportation?
2. Please describe what you can remember of that scene where the people gathered for deportation from the ghetto.
3. etc.

IV. WAR YEARS: CONCENTRATION CAMP EXPERIENCES

A. Personal Experiences

1. How many camps were you in?
2. What was (were) the name(s) of the camp(s)?
3. etc.

B. General Description of Camp

1. Where was your camp located?
2. What different types of prisoners were there (ex. gentiles, Jews, political, gypsies, criminals, homosexuals, etc.)?
3. etc.

V. LIBERATION AND AFTERMATH

A. The First Days of Liberation

1. Who liberated you?
2. When and where were you liberated?
3. Can you recall the moment of liberation...could you describe your feelings at that time?
4. etc.

B. Displaced Persons Camp

1. What DP camp did you reside in?
2. How did you get to the DP camp?
3. etc.

C. Rehabilitation - U.S.A.

1. On what date did you leave Europe?
2. Where did you go?
3. etc.
APPENDIX E
SPECIFIC COPING QUESTIONS

The following questions which were imbedded in the Interview Questionnaire were specifically constructed to tap additional detailed information on the type, manner, form, and frequency of the coping mechanisms used by the respondent.

IV. WAR YEARS: CONCENTRATION CAMP EXPERIENCES

1. Did you or other prisoners try to do anything special to help each other or to avoid being selected during the selection process?

2. Were there any special strategies that you personally felt or used to protect yourself from selection?

3. Was there any time in your day or night when there was time just to sit and think? Can you recall any special thoughts that would come to your mind again and again?

4. Can you describe any incidents where you or your fellow prisoners helped each other?

5. Was there anyone upon whom you depended for help at any time?

6. Was there anyone who depended upon you for help at any time?

7. Do you recall any special relationships you had with any other prisoners?

8. When you think back, what single event, for you, was the most difficult of all your experiences in the camp?

9. Are there any other incidents that especially stand out in your mind?

10. Did your past or pre-war life in any way help you to get through the camp experience?

11. How did you keep from giving up the struggle?

12. Were there any particular beliefs or values that you held which helped you to live through these deperate times?

13. Was there any special thing you did to help yourself get through a particularly difficult or frightening experience?

14. Did you have any special way of fighting your own lonliness?
## APPENDIX F
### COPING INVENTORY

1. Anticing - surrender to stress
2. Assisting or showing concern for another
3. Compensation
4. Denial
5. Depersonalization
6. Differential focus on the good
7. Displacement
8. Dissociation
9. Fantasy
10. Fatalism
11. Focus only on the past
12. Focus only on the present
13. Group affiliation
14. Hope
15. Humor
16. Idealization
17. Identification
18. Incorporation
19. Intellectualization
20. Introjection
21. Isolation
22. Magical thinking
23. Mastery (External)
24. Mastery (Internal)
25. Motor activity heightened
26. Negativism
27. Obedience
28. Overcompensation
29. Projection
30. Rationalization
31. Reaction formation
32. Rebelliousness
33. Receiving assistance or concern from another
34. Regression
35. Religious faith or beliefs
36. Repression/Supression
37. Sublimation
38. Substitution
39. Survival for some specific purpose
40. Symbolization
41. Undoing
42. Will to live
APPENDIX G
DEFINITIONS OF COPING MECHANISMS

Anticoping – surrender to stress.

"Here the person completely surrenders to the stress and acknowledges that 'it is right and the Self is wrong.' ... this strategy removes the dissonance of the situation. To the extent that the inmate was able to identify himself as vermin belonging in the camps, he would feel his internment to be just ..." (Dimsdale, 1980, p. 172).

Assisting or showing concern for another

Compensation

"A defense mechanism ... by which the individual attempts to make up for (i.e. to compensate for) real or fancied deficiencies. Also a ... process in which the individual strives to make up for real or imagined defects of physique, performance, skills, or psychological attributes" (American Psychiatric Association, 1975, p. 34).

Denial

"A ... mechanism ... used to resolve emotional conflict and allay anxiety by disavowing thoughts, feelings, wishes, needs, or external reality factors that are ... intolerable" (APA, 1975, p. 41).

Depersonalization

"Feelings of unreality or strangeness concerning either the environment or the self or both" (APA, 1975, p. 42).

Differential focus on the good

"This is essentially a 'figure-ground' problem; a person at all times has a choice as to what to focus on – foreground or background, good or bad. In most instances camp inmates adjusted their demands for pleasure so that these demands were consistent with the environment. Thus many focused on the small gratifications of getting through the food line without a beating and ignored the larger tragedies of the camps. Also involved here is the simple appreciation of beauty, even in the midst of ugliness" (Dimsdale, 1980, p. 167).
Displacement

"A . . . mechanism . . . in which an emotion is transferred from its original object to a more acceptable substitute used to allay anxiety" (APA, 1975, p.44).

Dissociation

"A . . . mechanism . . . through which emotional significance and affect are separated and detached from an idea, situation, or object. Dissociation may defer or postpone experiencing some emotional impact as, for example, in selective amnesia" (APA, 1975, p. 44).

Fantasy

"An imagined sequence of events or mental images, e.g., day dreams. Serves to express unconscious conflicts, to gratify unconscious wishes, or to prepare for anticipated future events" (APA, 1975, p. 55).

Fatalism

" . . . a kind of null coping where the person does nothing, internally or externally, to mediate the stress but instead relies on fate or others" (Dimsdale, 1980, p. 171).

Focus only on the past

Focus only on the present

Group affiliation

"The group was one place where one was not a number but a comrade. Groups ranged from the political (e.g., the Community party) to collections of people from the same country or to small family groups . . . (or) the two-person friendship group . . . " (Dimsdale, 1980, p. 171).

Hope

"There were two forms of hope; one was an active hope, a belief that the camps were aberrant and would not last - a conviction that 'this cannot go on forever.' The second hope was more passive, conveying the attitude 'Where there is life, there is hope'" (Dimsdale, 1980, p. 170).
Humor

Idealization

"A mental mechanism ... in which the individual overestimates an admired aspect or attribute of another person" (APA, 1975, p. 88).

Identification/Imitation

"A ... mechanism ... by which an individual patterns himself after another" (APA, 1975, p. 89).

Incorporation

"A ... mechanism ... in which the psychic representation of a person or parts of him, are figuratively ingested" (APA, 1975, p. 90).

Intellectualization

"The utilization of reasoning as a defense against confrontation with unconscious conflicts and their stressful emotions" (APA, 1975, p. 91).

Introjection

"A ... mechanism ... whereby loved or hated external objects are taken within oneself symbolically. The converse of projection" (APA, 1975, p. 92).

Isolation

"A ... mechanism ... in which an unacceptable impulse, idea, or act is separated from its original memory source, thereby removing the emotional charge associated with the original memory" (APA, 1975, p. 92).

Magical thinking

"A person's conviction that thinking equates with doing ... Characterized by lack of realistic relationship between cause and effect" (APA, 1975, p. 98).

Mastery (External and Internal)

There are two forms of coping mechanisms where one expresses "some autonomy through mastery of a portion of the universe, external or internal ... " (Dimsdale, 1980, p. 169). The first, or external form, consists of "ways of actively manipulating or resisting the stress system" (Dimsdale, 1980, p. 169). The second, or internal form, is "counterthought - resisting the internal impact
of the system, not allowing oneself to be crushed or dehumanized by it. The concentration camp provided very little room for autonomy through counteraction ... anything the inmate did consciously to stay alive was an expression of his or her autonomy. Gathering information, helping fellow prisoners, resisting the camp machinery even in the most trivial ways — all these activities (represent mastery). No matter how rigidly the SS controlled mastery through action, there was still attitudinal mastery. This, too, faced a massive onslaught; it was difficult to maintain any self-esteem under camp conditions, and yet many inmates were able to continue thinking of themselves as human instead of "ungeziefer" (vermin), as they were called by the SS." (Dimsdale, 1980, p. 170).

Motor activity heightened

Negativism

"Opposition and resistance to suggestions or advice" (APA, 1975, p. 107).

Obedience

Overcompensation

"A . . . process in which a real or imagined physical or psychologic deficit inspires exaggerated correction" (APA, 1975, p. 114).

Projection

"A . . . mechanism . . . whereby that which is emotionally unacceptable in the self is . . . rejected and attributed (projected) to others" (APA, 1975, p. 125).

Rationalization

"A . . . defense mechanism . . . in which the individual attempts to justify or make . . . tolerable, by plausible means, feelings, behavior and motives that would otherwise be intolerable" (APA, 1975, p. 133).

Reaction formation

"A . . . mechanism . . . wherein attitudes and behavior are adopted that are the opposites of impulses the individual harbors . . . (e.g. excessive moral zeal may be a reaction to strong . . . asocial impulses)" (APA, 1975, p. 133).

Rebelliousness
Receiving assistance or concern from another

Regression

"The partial or symbolic return to more infantile patterns of reaction. Manifested in a wide variety of circumstances such as normal sleep, play, severe physical illness, and in many mental disorders" (APA, 1975, p. 134).

Religious faith or beliefs

Repression/Suppression

"A ... mechanism ... that banishes unacceptable ideas, affects, or impulses .. . (but the material may later) emerge in disguised form" (APA, 1975, p. 135)/"the conscious effort to control and conceal unacceptable impulses, thoughts, feelings, or acts" (APA, 1975, p. 146).

Sublimation

"A ... mechanism ... by which instinctual drives, consciously unacceptable, are diverted into personally and socially acceptable channels" (APA, 1975, p. 145).

Substitution

"A ... mechanism ... by which an unattainable or unacceptable goal, emotion, or object is replaced by one that is more attainable or acceptable" (APA, 1975, p. 145).

Survival for some specific purpose

"The person ... had to survive (as, for example,) to help a relative, to bear witness and show the world what had happened, or to seek revenge" (Dimsdale, 1980, p. 167).

Symbolization

"A ... mental process operating by association and based on similarity and abstract representation whereby one object or idea comes to stand for another through some part, quality, or aspect in which the two relate. The symbol carries in disguised form the emotional feelings vested in the initial object or idea (APA, 1975, p. 146).
"A . . . mechanism . . . in which something unacceptable and already done is symbolically acted out in reverse, usually repetitiously, in the hope of relieving anxiety (APA, 1975, p. 151).

Will to live

While the "will to live" may be exhibited in a very purposeful way, "for some, this (was an) almost protoplasmic unthinking reaching out for life . . . In the concentration camps there was no question but that to prolong life meant to prolong suffering. Many people performed the mental calculations, decided it would be better to die, and yet continued to try for survival semiconsciously" (Dimsdale, 1980, p. 170).

a Portions of the quotations have been omitted where they did not pertain to a general definition or where they appeared to carry a judgemental value or theoretical assumption as, for example with the words, "unconscious defense mechanism."

b Coping mechanisms which are self-evident from their names are not defined.
## APPENDIX H
### 1982-83 TRAINING SYLLABUS FOR VOLUNTEER INTERVIEWERS

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Lecture</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 4</td>
<td>10am-12pm</td>
<td>Orientation</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overview and goals of oral history</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Viewing of video taped interviews</td>
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<tr>
<td>Oct 5</td>
<td>1pm-3pm</td>
<td>Holocaust Course</td>
<td>Varies</td>
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<td>Dr. Howard Messinger, Adjunct Professor in History</td>
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<td>Florida International University</td>
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<td>Oct 12</td>
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<td>The Tragedy of the Holocaust</td>
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<td>Bennett Bramson, Holocaust Studies Instructor</td>
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<td>Central Agency for Jewish Education</td>
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<td>Oct 26</td>
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<td>View Four Full Interview Testimonies</td>
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**TOTAL HOURS 66**
APPENDIX I

THE SOUTHEASTERN FLORIDA HOLOCAUST MEMORIAL CENTER, INC.
RELEASE FORM

I hereby give to the Southeastern Florida Holocaust Memorial Center, Inc., permission to utilize the video and/or audio tapes for such professional, educational, historical, and scholarly purposes as the Directors of the Southeastern Florida Holocaust Memorial Center, Inc., shall deem proper.

I understand that the contents of the tapes may be edited by the Southeastern Florida Holocaust Memorial Center, Inc., for which I also have no objection.

I further understand that any commercial use whatsoever made of the tapes or the transcriptions of my interview by the Southeastern Florida Holocaust Memorial Center, Inc., will be for educational, scholarly or otherwise academic purposes.

And the undersigned, for him/herself, his/her heirs and assigns, does hereby release and relieve the Southeastern Florida Holocaust Memorial Center, Inc., and the individuals now or hereafter engaged therein, from any and all liability of every kind or character to the undersigned and the heirs and assigns of the undersigned, by reason of the use, reproduction, or publication of said video and/or audio tapes and any other materials provided for such professional, educational, historical or scholarly purpose as may be determined by the Southeastern Florida Holocaust Memorial Center, Inc.

DATED this ___ day of ________________.

Witnesses:

Legal Signature

Legal Signature of Interviewee

Legal Signature

Printed Name of Interviewee
APPENDIX J
INFORMED CONSENT

The purpose of this study is to evaluate the methods that people use to cope in the face of extreme adversity. Specifically, how did survivors of the Nazi concentration camps cope during this experience? We will examine the types of coping mechanisms used during internment and the possibility that certain of these mechanisms may have been more beneficial than others insofar as they relate to present life satisfaction.

Procedures: As a volunteer participant in this research project you will be asked to do the following:

a. give an oral history of your life experience during the Holocaust to an interviewer
b. complete a biographical questionnaire
c. fill out a life satisfaction questionnaire

Risks: No discomfort or risks are anticipated. While a copy of your interview will be maintained by the Southeastern Florida Holocaust Memorial Center and the principal investigator, the biographical questionnaire and the results from the life satisfaction questionnaire will be maintained by the principal investigator under strictest confidentiality. The results of this study (unless you specify otherwise) will be erased of any and all identifying information.

Benefits: A final, audit-edited copy of your interview together with a copy of the biographical questionnaire, will be available upon request at the conclusion of this study or as soon as possible following the conclusion of this study. The results of this research will be donated to the Southeastern Florida Holocaust Memorial Center and will be available to all participants upon request at the Center.

Alternative Procedures: None

Inquiries: The principal investigator may be contacted at the address shown above and will provide responses to any questions which the participants may have, at any time.

Withdrawal: Participants are free to discontinue at any time. Withdrawal from this study incurs no penalties whatsoever and will not affect your association with, and/or given or intended contribution to the Southeastern Florida Holocaust Memorial Center.

Monetary Compensation: None

Insurance: Not applicable

"I have read and I understand the procedure described above. I agree to participate in the procedure and I have received a copy of this description."

Signature

Relationship if other than subject

Witness ___________________________ Date _____
### APPENDIX K

**RELATIONSHIP BETWEEN TYPE OF COPING MECHANISM USED AND LIFE SATISFACTION SCORE**

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Note. Group 1 used the mechanism; Group 2 did not use the mechanism.
APPENDIX L
EXAMPLES OF TESTIMONY EXCERPTS FOR SELECTED COPING MECHANISMS

Subject No.

"I'm going to die anyways. I was very depressed. I didn't care what happened anymore."

Selected Coping Mechanism: Anticoping - surrender to stress

Subject No.

"The SS came into our barracks and wanted to know who turned out the light. I knew if nobody said anything we could all be punished. So I said, 'It was me who turned out the light,' and I took the 25 lashes."

Selected coping mechanism: Assisting or showing concern for another

Subject No.

"They assigned me to the coal mines. It was to me like I was a professional coalminer. I didn't even perspire."

Selected coping mechanism: Compensation

Subject No.

"I don't know if they had ovens in Mauthausen. I don't want to know. I never wanted to find out."

Selected coping mechanism: Denial

Subject No.

"It was like a nightmare. It was like something out of this world I really couldn't grasp what was happening."

Selected coping mechanism: Depersonalization

Subject No.

(First impression of Dachau): "It was a clear day, sunny in the mountains."

Selected coping mechanism: Differential focus on the good.
Subject No.

"I was furious, enraged at the Kapo, raged with him when he said that the only way out of Auschwitz was up the chimney." (Research note: A Kapo was another concentration camp prisoner).

Selected coping mechanism: Displacement

Subject No.

Q.: "You took the bodies from the gas chambers to the crematoriums?" A.: "Yes, I took the bodies." (Research note: Said without affect).

Selected coping mechanism: Dissociation

Subject No.

"You talked about the good times, things that you ate, good cake, what you ate, who has a good recipe for this..."

Selected coping mechanism: Fantasy

Subject No.

"Whatever will happen, will happen."

Selected coping mechanism: Fatalism

Subject No.

"I kept on thinking what I was doing a month before. It gave me strength. The hands that were sloughed off were doing an exam one month before. Three weeks ago my mother was preparing the table."

Selected coping mechanism: Focus only on the past

Subject No.

"You're just interested in the next step, not what things mean...we lived from day to day."

Selected coping mechanism: Focus only on the present

Subject No.

"I was so happy in Auschwitz because I was with all my friends. We were together."

Selected coping mechanism: Group affiliation

Subject No.

"I knew that someday we would be liberated, and the camps would come to an end. This is what kept me going."

Selected coping mechanism: Hope
Subject No.

"We called it 'the five barrel gallows.'"

Selected coping mechanism: Humor

Subject No.

"...the commandant Sherman, he was a beautiful man..."

Selected coping mechanism: Idealization

Subject No.

"I tried to be like my girlfriend. She had been a model. Somehow, every morning she found the strength just before appell to go out into the snow and wash her face. If she could do this, so could I and I followed her out each morning and did the same. (Research note: Appell means roll-call in German.)

Selected coping mechanism: Identification/Imitation

Subject No.

No excerpt.

Selected coping mechanism: Incorporation not found.

Subject No.

"There were no selections for us, we were young. They needed us."

Selected coping mechanism: Intellectualization

Subject No.

(Talking about his overseer who was a murderer) "As I shaved, I killed 200 a night." (Research note: Killed here refers to the cutting of his whiskers.)

Selected coping mechanism: Introjection

Subject No.

"There were all kinds of stuff going on in Auschwitz...we waited two months and I saw people carrying bodies out."

Selected coping mechanism: Isolation

Subject No.

"On the boat, a voice above me seemed to say, 'Don't jump, we're going to be safe.' I thought then, as long as I don't jump I'll be safe.

Selected coping mechanism: Magical thinking
Subject No.

"We kept dead prisoners to collect their rations."

Selected coping mechanisms: Mastery (External)

Subject No.

"We were healthy and young. Even after they shaved us, we were beautiful."

Selected coping mechanism: Mastery (Internal)

Subject No.

"We worked Sunday in order not to go through the selections. I didn't walk, I ran. I volunteered for everything."

Selected coping mechanism: Motor activity heightened

Subject No.

"It was simple. Whatever they (the Germans) told us to do, we did the opposite. One day the Germans asked if we had friends or relatives in Bergen-Belsen or Theresienstadt and no one said a word."

Selected coping mechanism: Negativism

Subject No.

"We weren't allowed to go back to the main camp. If you did your work, you got away. If you disobeyed, you'd get lashed. I always did what they told me to do."

Selected coping mechanism: Obedience

Subject No.

"I became in Buna, a number one carpenter, singer, and boxer."

Selected coping mechanism: Overcompensation

Subject No.

"He was a henchmen to the Germans." (Research note: The survivor had connections with the Germans, not the 'henchman').

Selected coping mechanism: Projection

Subject No.

"I ate more grass than a cow, but I think it was healthy."

Selected coping mechanism: Rationalization
"Yes, it is true I was a man given to violence, but not there. No, there I became gentle and devoted to peace. They used to think I was a Rabbi . . . I never had an angry thought." Q.: "Not even towards the guards?" A.: "No, no, towards none of them. I told you, I became a gentle person. I would never strike anyone, not for no reason, nothing."

Selected coping mechanism: Reaction formation

"When the Gestapo asked for all jewelry in Auschwitz, I took my watch, put it on the ground and stamped on it."

Selected coping mechanism: Rebelliousness

"An SS man made me head of the kitchen and he claimed to have known me from before."

Selected coping mechanism: Receiving assistance or concern from another

"I started to cry and cry and cry. After that anytime anything went wrong, all I could do was cry and cry and cry."

Selected coping response: Regression

"For Passover, I didn't want to eat any bread. We had to keep up the faith . . . I found a Humash (Bible), it was Purim, we're going to read the Megillah, despite the Nazis."

Selected coping mechanism: Religious faith or beliefs

"Nothing much happened to me in Auschwitz. But life in the next camp, the labor camp, was very difficult. I remember every detail of that awful place." (Research note: Subject lost his wife and child in Auschwitz).

Selected coping mechanism: Repression/Suppression

"No, I never thought about girls, I had to concentrate on my singing, I used to practice singing in bed."

Selected coping mechanisms: Sublimation
We never talked about getting out, our future, what we will do later. We were only hoping they would take us to a labor camp."

Selected coping mechanism: Substitution

"I had different drives to stay alive. One, to stay alive. Two, I'm not going to give into those bastards. Three, what happens if my family survives and I don't?"

Selected coping mechanism: Survival for some specific purpose

"If you look at them, it's the same in the Haggada, carrying stones from one place to another for nothing at all." (Research note: Subject is describing his role in a quarry labor detail. The Hagadda refers to the story of Passover when the Jewish people were liberated from slavery in Egypt).

Selected coping mechanism: Symbolization

"To survive at that moment was important. To survive that day. I wanted to survive."

Selected coping mechanism: Will to live
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BIOGRAPHICAL SKETCH

Patricia A. Lutwack was born in Buffalo, New York. She received her undergraduate degree from Boston University. She continued her education at Boston University in Belgium where she majored in soviet affairs and received a Master of Arts degree in international relations.

She began her graduate studies in counseling at the University of Miami where she received a Master's degree in that area in 1976. That same year she was awarded the Honors Scholarship in Psychology and was the recipient of two Dade County mental health awards, one for counseling and another for innovative programming.

She continued her graduate studies at the University of Florida, specializing in counseling psychology. During this time she also completed a separate course of studies to receive the Graduate Certificate in Gerontology.

Ms. Lutwack presently lives and works in Miami, Florida where she is the Director of Programs and Research for The Southeastern Florida Holocaust Memorial Center located at Florida International University.
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Theodore Landsman, Ph.D., Chairman
Professor, Departments of Psychology
and Counselor Education

Dorothy D. Nevill, Ph.D., Co-Chairperson
Associate Professor, Department of Psychology

Benjamin Barger, Ph.D.
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This dissertation was submitted to the Graduate Faculty of the Department of Counselor Education in the College of Education and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

April, 1984

Dean for Graduate Studies and Research