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The Role of Values in the Stress and Coping Process:
A Study in Person-Situation Interactions

by

Carolyn M. Aldwin

DISSERTATION

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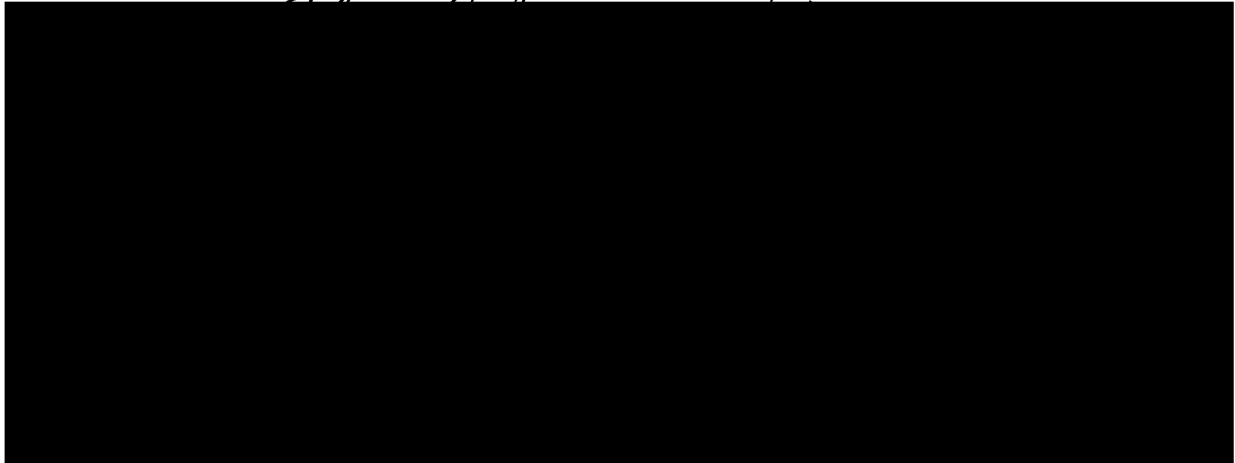DOCTOR OF PHILOSOPHY

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ABSTRACT

A major gap in the stress and coping literature has been the lack of research on personality variables which affect the mediators of stress. The present study assessed patterns of coping and everyday negative and positive experiences (hassles and uplifts) in 100 adequately functioning, middled-aged men and women over the course of a year. Personal values, as measured by subscales developed from the Buhler (1965) Life Goals Inventory, are related to the pattern of hassles and uplifts, demonstrating that values influence the perception of what is, or is not, stressful.

Values are also expressed in preferred modes of action, and they were related in this study to strategies used in coping with everyday stressful episodes. Which coping strategies related to individual values was in part dependent upon the type of problem being faced. For example, valuing affiliation related to problem-focused coping in family

situations, but to an avoidant strategy with work problems. It is suggested that values will lead to more direct modes of coping when a problem is ego-syntonic, but to avoidant strategies if the problem is ego-dystonic.

Values were also mildly related to the psychological outcomes of morale and depression. For example, in this middle-aged sample, valuing creativity was significantly correlated with positive morale, and valuing caution with depression. As the correlations between values and the previously mentioned mediators of stress were stronger than those with the outcome measures, it is likely that values relate to adaptive outcomes primarily through their influence on coping and the perception of stress.

There were no age differences in values, but men did value power and success significantly more than women. The main sex differences, however, were not so much in what was valued but in what common values were related to. In men, values related primarily to their pattern of hassles and uplifts; in women, values related primarily to patterns of coping strategies.

While the reason for this finding is unknown, it is speculated that differences in male and female social role constraints may allow men more discretion in the types of problems they choose to manage (see Rubin, 1975). Thus, personal values in men influence their pattern of perceived

stress more than subsequent coping efforts. For women, how-
ever, personal values were thought to relate more strongly
to coping efforts because they were less able to control the
types of problems they must manage due to their more exten-
sive role obligations.

Thus, values were found to be important in stress and
coping processes. Their relationship to these processes was
modified not only by situational demands but also by social
roles. This supports Lazarus' (1966; 1980) call for a pro-
cess approach in the study of personality, stress and coping
which takes into account the social and environmental con-
text.

Richard S. Lazarus, Ph.D.

Finally, I am blessed by truly remarkable friends and family, to whom I would like to offer my heartfelt thanks. Specifically, Linda Catron has been marvellous with her support throughout the production of this dissertation. Dr. Robert Ornstein has taught me that I can do far more than I thought possible. Rick Levenson's guidance, criticism and support has meant far more to me than I can possibly express. My mother, Anne Aldwin, has provided truly generous support, and I would like to dedicate this dissertation to her.

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Introduction

Much attention has been paid in both the professional

and popular press about the damaging effects of stress. yet

stress is ubiquitous -- it is part of everyone's experience,

whether it is in the form of major life problems or minor

irritating hassles. There is a growing awareness that there

are individual differences in response to stress -- some

individuals appear to be overwhelmed by simple problems,

others thrive under pressure and may actually seek dangerous

situations. How an individual copes with stress may be more

important for his or her psychological and physical well-

being than the simple presence or absence of stress.

Yet, at the present time, very little is actually known

about coping (Chiriboga, in press; Folkman and Lazarus,

1980). We need to know more about what actions, both cogni-

tive and behavioral, constitute coping, what situational

demands and personality characteristics influence the choice

of coping strategies, and what impact these strategies have

on various psychological and physiological adaptive out-

comes.

The Berkeley Stress and Coping Project has provided provide basic descriptive research, developing new ways of looking at the personality and situational antecedents of stress and coping, and the consequences that these have for psychological and physical well-being. Previous project-related research efforts on coping strategies has focused on a new means of assessing coping, examined situational and cognitive appraisal influences on choice of coping strategies, and the relationship between coping and adaptational outcomes (Folkman and Lazarus, 1980; Coyne, Aldwin and Lazarus, 1981; Aldwin, Coyne and Lazarus, 1982).

Statement of Problem

The purpose of the present study is to extend the previous work of the Berkeley Stress and Coping Project by adding a personality dimension, namely personal values, to the investigation of the relationship between stress, coping and adaptation. Personal values are hypothesized to influence the perception of stress, and also to moderate the relationship between stress and adaptational outcomes (i.e., morale and depression) through their influence on coping.

Personal values are hypothesized to be a personality characteristic which might influence the mediators of stress for a number of reasons. First, values are conceptually

relevant. The theoretical model guiding the Berkeley Stress and Coping Project (Lazarus, 1966; 1980) is based upon individual differences in the perception of and response to stress. Values have long been known to influence perceptual processes (for reviews see Jenkins, 1957; Klinger, 1975). They are also thought to be relevant in problem-solving and decision-making processes (e.g., Rokeach, 1973), which are central to coping responses to stress (Janis and Mann, 1977). Second, values are generally assumed to be important in adaptation at both an individual and social level (e.g., Kohler [1936] 1976; Kluckhohn, 1951; Sorokin, 1959; von Bertalanffy, 1959). As Maslow (1959:vii-viii) stated:

> The ultimate disease of our time is value-lessness. . . The state of valuelessness has been variously described as anomie, amorality, anhedonia, rootlessness, emptiness, hopelessness, the lack of something to believe in and be devoted to. . . The cure for this disease is obvious. We need a validated, usable system of values, values that we can believe in and devote ourselves to because they are true. . .

However, little systematic research has been devoted to assessing whether values are important for adaptational outcomes or through what pathways values might have this effect. For example, do some values form a buffer against stress or can they render individuals more vulnerable to stress? Do some values lead to more effective coping strategies than others?

The purpose of the present study is to assess the

influence of values on adaptational outcomes at the individual level, and identify possible pathways through which this influence takes place. To the extent that values involve a concept of what is desirable, it is plausible that the types of values held influence what is perceived as a source of stress and/or positive experiences. To the extent that values include preferred modes of conduct, it is likely that values may influence the choice of coping strategies as well. Thus, this study will explore the role of values in the experience of stress and coping.

General Theoretical Background

This section will briefly review general approaches in the stress and coping literature, with special attention to the problem of individual differences in the perception of and response to stress.

Definitions of Stress

There are essentially three ways of defining stress (see Haan, 1977; Lazarus and Launier, 1978; Mason, 1975): (1) as a (psycho)physiological response or a state of the organism; (2) as a stressor, that is, a stimulus impinging upon the organism; and (3) as a result of a person-situation interaction.

Stress as a Physiological Response. Hans Selye ([1956] 1976) defined stress as the general reaction of the body to

change. The General Adaptation Syndrome (GAS), the general-
ized physiological response to change, occurs in three
stages. The alarm reaction consists of the physiological
mobilization of the organism, which involves enlargement of
the adrenal cortex, atrophy of the thymus, spleen and lym-
phatic structures, and ulcers in the duodenum. If the
organism survives this experience, the stage of resistance
follows, which consists of a reversal of the physiological
effects of the alarm reaction. With continued exposure to
the noxious stimulus, however, the stage of exhaustion
ensues, which strongly resembles the original alarm reaction
and which may result in death.

Selye strongly believed that all noxious stimuli elicit
the same physiological reaction. However, evidence is accu-
mulating that psychological processes can moderate the phy-
siological effects of stress, and that there are individual
differences in the physiological responses to stress. A
series of studies by Mason, et al. (1961a,b, and c) produced
different neuroendocrine patterns in monkeys by manipulating
the psychological component (meaning) of physiological
stressors. In addition, a psychological sense of control
may also moderate the effects of stress in the form of an
electric shock (Weiss, 1967), especially when the ability to
control an aversive situation is already well learned (Cor-
ley, Mauck and Shiel, 1975; Corley and Shiel, 1977). (The
latter studies demonstrated that having to learn how to con-

trol the shock during the experiment may be more stressful than simply receiving the shock, which may account for Brady et al.'s [1957] earlier finding that the animal who could control the shock developed more ulcers.)

Finally, a review of physiological responses to stress by Lazarus, Averill and Opton (1974) concluded that there were profound individual differences in the patterning of GSR, heart and respiratory rate, and hormone byproduct secretion. (See Stern, Cox and Shahn, 1981, for a good demonstration of the interaction between personality vari-ables and patterns of physiological responsiveness.) Current approaches to physiological responses to stress include the assessment of individual differences in and coping modera-tors of the neuroendocrinological and immune systems (c.f. Solomon and Amkraut, 1981).

Stress as an External Stimuli. The second approach to stress, that is, as a stressor or external stimuli impinging upon an organism, is best exemplified by life events research (e.g., Holmes and Rahe, 1967). This approach assumes that any change, either positive or negative, is stressful because it requires adaptation on the part of the organism. While this has generated a vast amount of research and has greatly expanded the field of stress and coping (c.f. Dohrenwend and Dohrenwend, 1974; Rabkin and Streuning, 1976; Rahe and Arthur, 1978), there are certain theoretical and methodological difficulties in this

approach.

First the life events approach ignores individual differences in the meaning of the stressor. Individual ratings of the stressfulness of an event is more predictive of psychophysiological symptoms than the standardized weighting system, which doesn't take into account the meaning of the event to the individual (Chiriboga, 1977.) Also, some individuals seem to be relatively immune to the effects of stressful life events (Kobasa, 1979, 1982). Second, change in and of itself does not appear to be stressful. Changes which have negative consequences are the main contributors to poor psychological or health outcomes; the positive changes are at best only weakly associated (e.g., Rabkin and Streuning, 1976; Billings and Moos, 1981). Third, the life events approach ignores other sources of stress, such as the non-occurrence of an expected event, and disregard parameters such as the unexpectedness or inappropriate timing of an event, which may contribute heavily to the perception of stress (Pearlin and Lieberman, 1979).

Stress as a Person-Situation Interaction. The third definition of stress, that as resulting from from person-environment interactions, has gained widespread acceptance. Mechanic (1978:2) defines stress as "the difficulties experienced by individuals as a result of perceived challenges". The perception of stress in this model is influenced by factors such as previous experience with similar
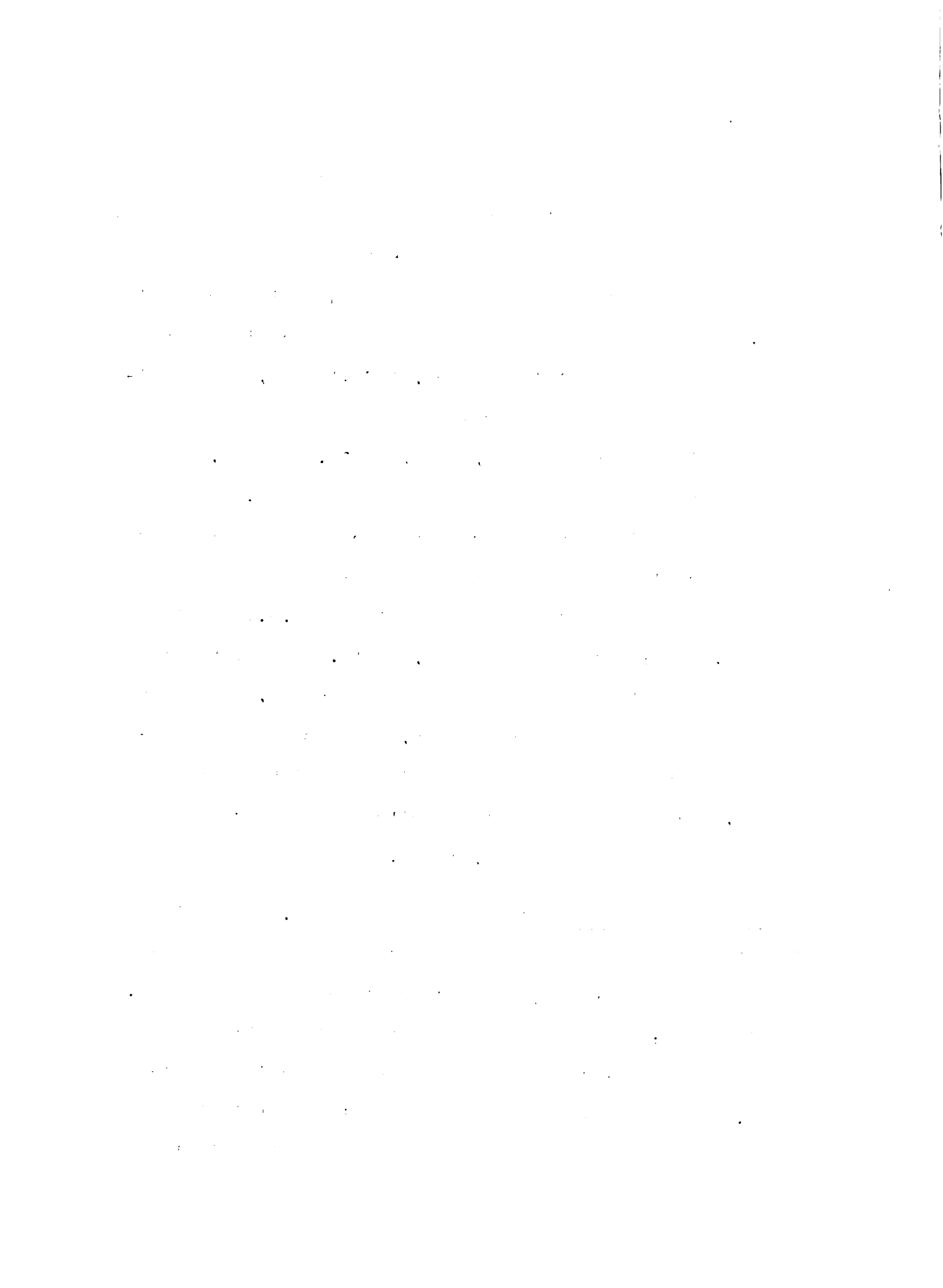
situations, the presence or absence of resources for coping with demands, the duration of the situation and the person's involvement in it. Pearlin and Schooler (1978:3) believed that stress results from "those enduring problems that have the potential for arousing threat." Problems are linked with specific role areas such as marriage, parenting, occupation and household economics.

Janis and Mann (1977:50) define stress as "unpleasant emotional states evoked by threatening events or stimuli." For Lazarus and Launier (1978), stress refers to "any event in which environmental or internal demands (or both) tax or exceed the adaptive resources of an individual, social or tissue system" (their emphasis). This relationship is mediated by the person's cognitive appraisal of the situation, which is affected by both environmental variables (i.e., imminence and probability of harm, ambiguity) and person variables (including values, beliefs and commitments). The appraised significance of an event for an individual can be benign/positive or stressful. Stressful appraisals include harm/loss, threat or challenge.

However, stress can also result from simple frustration, such as misplacing things, having to deal with difficult co-workers, or getting caught in a traffic jam (e.g., Kanner, Coyne, Schaefer & Lazarus, 1981). Thus, stress can be defined as the experience of harm, threat, challenge or frustration arising from the configuration of personal and

environmental demands and resources.

Approaches to Coping

As we have seen, individual differences in the effects
of stress may be due in part to how stressful situations are
perceived, but they may also be due to differences in what
coping strategies are used. But, as noted above, little is
currently known about coping (Chiriboga, in press; Folkman
and Lazarus, 1980). Although the field is growing, basic
research is still needed into what constitutes coping
actions, the antecedents and consequences of coping stra-
tegies, and the social and developmental influences on cop-
ing. Ideally, a complete model of coping would:

1. include a wide range of coping strategies, both cogni-
   tive and behavioral;

2. account for individual differences in choice of coping
   strategies;

3. describe how situational demands influence coping;

4. account for the development of coping strategies across
   the lifespan;

5. describe how the social environment influences choice
   of coping strategies; and

6. predict how different coping strategies would relate to
   different adaptive outcomes and how these relationships
   are modified by situational and psychological demands.

As we shall see, most of these points are addressed at least
in a rudimentary way in the coping literature, but no one
model of coping currently addresses all of these issues.

Folkman and Lazarus have discussed four major concep-

tual approaches to coping: as defenses (psychodynamic); as traits (presumably representing coping styles); as responses to situational demands; and as an interaction or transaction between the person and the environment. We will see how well each of these types of approaches addresses these six criteria, beginning with trait approaches.

Trait approaches are designed specifically to address the problem of individual differences in the effects of stress and means of coping. In general, they dichotomize presumably antithetical modes of defense (Lazarus, Averill and Opton, 1974). Repression-sensitization (Byrne, 1964) and avoiders, copers and non-specific defenders (Goldstein, 1959) are representative of this type of approach. They focus on how attention is utilized, either attending to the stimulus and/or one's response to it, or focusing attention away from the stimulus and/or one's response to it (Mullen and Suls, 1981). Folkman (1979; Folkman and Lazarus, 1980) has pointed out that trait approaches are inadequate because they assume that only one strategy is used (repression or sensitization) without considering the meaning of the situation to the individual, which might lead to an alteration of coping strategies. One could easily see how an individual might use a vigilant coping strategy in work situations or an avoidant strategy with family problems, or vice versa, depending upon how comfortable he or she felt in dealing with these types of problems.

Secondly, trait approaches consider only a limited range of coping actions. While attention deployment is clearly one means of coping with stress, there are many other strategies which are not included (e.g., converting a stressful episode into a positive one).

Third, research utilizing this approach tends to leap from paper and pencil measures of attention deployment directly to outcome measures with little attention to intervening events (e.g., coping strategies). Cohen and Lazarus (1973) found that repression-sensitization actually did not predict how people actually coped in a stressful situation. Thus, the validity of trait constructs as predictors of coping processes is uncertain. This type of approach does not address developmental issues, or how these strategies are influenced or modified by situational demands or the social environment.

Psychodynamic approaches also address the problems of individual differences, adaptive outcomes, and may address developmental aspects as well (e.g., Menninger, 1963; Vaillant, 1976; Haan, 1977). They generally involve the hierarchical organization of defenses along some a priori conception of the effectiveness of each strategy, and sometimes describe adaptive types on the basis of the predominant defensive strategies used. While both Vaillant and Haan recognize that efforts to solve the problem are important, their primary emphasis is on the (unconscious)

regulation of emotion. Both are concerned with the develop-
mental aspects of coping and defensive strategies as well.

Vaillant (1977) characterized development over the
lifespan in terms of changes in the use of adaptive stra-
tegies. In a study of a class of Harvard men interviewed
periodically from their college years to mid-life, the men-
tally healthy men were thought to shift from using predom-
inantly immature defenses (e.g., fantasy and projection) and
neurotic defenses (e.g., intellectualization, repression) in
early adulthood to proportionately more mature defenses
(e.g., sublimation, humor) in later life. The mentally
unstable continued or actually increased their use of neu-
rotic and immature mechanisms over the life course.

Vaillant breaks away from traditional psychoanalytic
theory in recognizing that the use of defense mechanisms is
not inherently pathological (see also Lazarus and Golden,
1981), but his insistence on the unconsciousness of adaptive
strategies renders understanding how development occurs
problematic. If, as he states, they do not appear to be
linked to childhood factors, nor can one "will" or "cons-
ciously acquire" adaptive strategies (see pp. 61, 85), then
how do they develop? In his case descriptions of the evolu-
tion of defenses, it is apparent that the men Vaillant stu-
died did attempt to modify their adaptive styles (see pp.
107, 203), and the integration of the conscious and uncons-
cious aspects of adaptation is a central problem for

Vaillant's theory. The lack of interest in problem-solving techniques is also troubling, as are methodological problems in the similarity between criteria for adaptive categories and outcome measures (see Folkman and Lazarus, 1980).

Haan (1977) sought to integrate the conscious and unconscious aspects of adaptation by constructing a hierarchy based on whether an ego mechanism is conscious or unconscious. She identified ten basic (generic) ego processes which can be expressed in three modes: coping (which is conscious), defense and fragmentation (which are unconscious). Coping is flexible, purposeful, and allows moderate affective expression. Defensive strategies are compelled, negating and rigid, and are directed toward anxiety rather than the problem. Ego-failure or fragmentation most clearly distorts "intersubjective reality" and is automated, ritualistic and irrational. Development, then, consists of gaining progressive control over behavior, presumably shifting from defense to coping modes.

Haan also departs from traditional psychoanalytic theory in positing a constructivist rather than reactive view of man, e.g., humans actively construct and shape their environment rather than passively reacting to it. Yet there are some serious theoretical and methodological problems with this approach. The first problem lies in her assumption that coping is used only when the situation is not very stressful.[1] When there is anxiety and pressure, defenses are

employed. This, combined with a further assumption that defensive processes are a priori maladaptive because they distort reality, forces an untenable conclusion -- that people do not use adaptive coping strategies when faced with a stressful event. In the first place, coping, even using this narrow a definition, is clearly used in extremely stressful circumstances (see, e.g., Murphy and Moriarty, 1976). Second, defensive processes such as denial may prove useful in certain situations (Lazarus and Golden, 1981) and cannot be considered maladaptive without looking at their effect in a given situation.

Methodologically, inter-rater reliability for interview ratings of coping and defense tends to be low (see Morrissey, 1977). Joffe and Naditch's (1977) attempts to systematize measurement by using items from the California Psychological Inventory to assess coping and defense may be limited because it is questionable whether such inventories reflect the use of unconscious strategies.

1.
   "Coping processes are likely to be employed. . . when assimilation and accommodation are either quite evenly matched or the person experiences no pressure about the imbalance, for example, he's enjoying a new skill. . . Defensive strategies are needed when marked imbalances between assimilation and accommodation occur. . .
   "Fragmentation, as a retreat to privatistic assimilatory modes, occurs as an accommodation to stress and as a solution to a situation or to a likely developmental movement, where and when the required accommodations are not only beyond the person's capability, but also irrefutably contradict and confuse his self-constructions and make intrasubjective reality preferable" (Haan, 1977:49).

In sum, defense-focused orientations to coping are
unique in that they address, albeit in a rudimentary
fashion, the development of defensive and coping processes
over the lifespan. However, they tend to be unsatisfactory
because of their neglect of problem-solving techniques and
over-emphasis on (unconscious) attempts to regulate emo-
tions. They also neglect the impact of the situation and/or
the social environment on choice of coping and defensive
strategies. Adaptive outcomes are often pre-judged rather
than assessed, and criteria for the defensive strategies,
adaptive type and adaptive outcome are confounded. However,
they do attempt to address issues concerning the development
of coping strategies over the life course.

Situation-centered approaches generally observe how
people cope in extremely stressful or disastrous cir-
cumstances, such as tornadoes (Wallace, 1956), doctoral
exams (Mechanic [1962] 1978) or life-threatening illness
(for reviews see Appley and Trumbull, 1966; Cohen and
Lazarus, 1979). In general, these types of studies suffer
from lack of a theoretical orientation, poor comparability
between studies, and lack of generalizability to everyday
situations (Cohen and Lazarus, 1979; Folkman and Lazarus,
1980). However, they often provide valuable descriptions of
coping behavior, and are the only studies which have exam-
ined how the social environment influences choice of coping
strategies.

In his study of graduate students preparing for doctoral exams, Mechanic ([1962] 1978) identified three categories of adaptive strategies. Coping included strategies directed at the problem (the exam), such as taking courses, reviewing notes and articles, attempting to discover the types of questions on the exam, and time management. Defense referred to attempts to manage emotions, and included expressing hostility towards the faculty, joking to relieve tension and "comforting cognitions", such as favorable comparisons with previous students who had passed, etc. Interactive defense included talking with the faculty and other students to get their perceptions of the exam, and discovering how and what other students were studying (modelling). He concluded that "Modes of active coping and reassurance are usually consensual" (1978:42).

Mechanic (1974) identified three ways social factors can affect adaptation. First, a person's ability to acquire coping skills and their success depend upon the efficacy of the solutions that the culture provides and the adequacy of the institutions that teach them. Second, the types of motivation that people have and how they are channeled depends (in part) upon the incentive system that the society provides. Finally, social support plays a large role in the maintenance of psychological equilibrium, although as Mechanic ([1962] 1978) observed, social support may sometimes serve to increase tension and anxiety rather than

decrease it.

Janis and Mann (1977) also describe how social processes can affect decision-making and coping. For example, an individual makes decisions not only on the basis of his or her own utilitarian gains and self-approval or disapproval but also on how the decision will affect the utilitarian gains for significant others and their approval or disapproval. Social processes are also evident in group decision-making: what type of information is available, how it is processed, and what decisions are made. Janis and Mann investigated instances of very poor policy decisions which resulted in debacles such as Pearl Harbor and the Bay of Pigs, and concluded that groupthink was involved -- that is, poor decisions were made because of adverse social pressure which resulted in the denial of real threat and inadequate preparation for action.

In a time when social support is widely assumed to be beneficial, Janis and Mann's discussion of groupthink demonstrates that certain types of social support can inhibit effective coping, as does Mechanic's discussion of wives who increased rather than decreased their husband's anxieties. Thus, situation-centered approaches to coping can provide information on the effect of social processes on coping which is so far unavailable with other types of approaches. However, they do not address developmental concerns, and they tend to minimize or ignore personality as a source of

individual differences in coping responses.

Interactive approaches to coping emphasize that coping
cannot be adequately assessed only by examining personal
predispositions or situational demands. Rather, there is an
interaction or transaction between personality characteris-
tics and environmental demands which results in coping
actions. Coping in this system is seen as a multi-faceted
process which evolves over time and is responsive to changes
in the environment. Thus, actual coping strategies in
stressful situations must be assessed in order to understand
the multiple determinants of coping. The goal of interac-
tive approaches is to develop broad descriptions of a wide
range of coping activity (e.g., Murphy and Moriarty, 1976;
Folkman and Lazarus, 1980; Aldwin, Coyne and Lazarus, 1982).

Lazarus and his colleagues (Lazarus, 1966; Lazarus,
1980; Lazarus & Launier, 1978; Lazarus and Folkman, in
press) have developed perhaps the most explicit interac-
tional or transactional model of stress and coping that is
currently available. As mentioned previously, stress in
this model is defined as residing in the relationship
between the person and the environment which is mediated by
cognitive appraisal and coping.

Appraisal is divided into two categories: primary and
secondary appraisal. Primary appraisal of stress is a
fusion of both personal and environmental characteristics

and reflects the stakes a person believes are engendered by
an ongoing relationship or transaction. If an event is
appraised as stressful, e.g., as involving harm/loss, threat
or challenge, the individual will assess the available
resources to cope with it. This assessment is termed secon-
dary appraisal and affects both the choice of coping stra-
tegies and primary appraisal. If a person believes that he
or she has sufficient resources to handle a threat, the pri-
mary appraisal of threat will be diminished. But if the
individual fears that the resources are not adequate to ward
off the threat, the situation is appraised as more stress-
ful. Thus, the possibilities for coping can modify the pri-
mary appraisal.

Coping in this model refers to any thought or behavior
which is an effort to master, resolve or manage the problem
and the attendant emotions (Folkman and Lazarus, 1980;
Lazarus and Launier, 1978). In the overwhelming majority of
cases, both problem and emotion focused coping are used,
although the relative emphasis on one type or the other may
vary as a result of situational demands or appraisal (Folk-
man and Lazarus, 1980). Rather than being a personality
trait, which is assumed consistent across situations, or
simply a response to a situational demand, coping is an
active synthesis of the person and the situation. People
are assumed to use multiple strategies and change them
depending upon the effect they have on the problem or their

emotions. Thus, rather than assuming that a particular strategy is effective or harmful, the emphasis is on describing the effects of particular strategies in cir-cumscribed situations (see Aldwin, Coyne and Lazarus, 1982).

The availability of resources plays an important role in coping. Personal resources include financial means, a sense of competence, or previous experience. Environmental resources, as in social support, can take the form of emo-tional aid, advice giving, or physical support, such as lending money, doing errands, etc. Whether or not a person chooses to utilize resources and how they do so is as impor-tant as whether or not the resources actually exist.

Not only do resources affect coping, but how one copes can affect the resources available. For example, it has been noted that a good social support network can serve as a buffer against stress, and a poor one can be associated with increases in the risk of physical illness (Berkman and Syme, 1979; Cassell, 1974; Nuckolls, et al., 1972). However, peo-ple who have poor social networks may be coping in a way which alienates others, and thus both the physical illness and the poor social network may be reflections of coping rather than causally related (Schaefer, Coyne and Lazarus, 1981; Bloom, 1979).

Lazarus and his colleagues have developed a framework for the study of coping which can potentially satisfy the

six criteria for a complete model of coping mentioned previously. While the present model does not include developmental concerns[1], it does include a wide range of both cognitive and behavioral strategies, allows for the influence of both situational and personality factors (primarily through the medium of cognitive appraisal), and has started to address the adaptational outcomes of coping (Lazarus and Golden, 1981; Cohen and Lazarus, 1979; Coyne, Aldwin and Lazarus, 1981; Aldwin, Coyne and Lazarus, 1982).

Factors Influencing Coping and Adaptation

Three factors influencing coping have been identified. Social influences include social support, social pressure, role models and culturally-available solutions. These may include culturally approved modes of handling problems (c.f. Zborowski's [1974] discussion of how different American ethnic groups handle pain) and/or social institutions designed to mitigate or resolve certain types of stresses (c.f. Aldwin and Lazarus' [Note 1] discussion of how healing rituals can be used in traditional societies to cope with family

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[1]
It is through a more intensive study of coping resources that the model can begin to address the development of coping. Coping resources include both skills and inner strengths or capacities. For example, the development of frustration and tolerance in childhood might lead to the development and utilization of different coping techniques. In turn, experience with a wider range of coping techniques might enhance a sense of mastery, which might feed back into the deveopment of patience and frustration tolerance. In short, one could develop a transactional approach to the development of personal resources and coping strategies.

and other interpersonal problems).

Situational factors include the nature of the harm or
threat, the imminence and degree of threat, and its
ambiguity/uncertainty. Ambiguity/uncertainty may be charac-
terized in terms of the degrees of freedom of action that a
situation allows. If there are only one or two clear-cut
possibilities for action in a situation (e.g., jumping out
of the way to avoid a speeding car), the situation may be
the primary determinant of coping. If, on the other hand,
there is uncertainty or ambiguity, there may be a number of
different possible courses of action possible, and personal-
ity preferences for certain modes of action may become more
important. Personal factors which influence coping include
predispositions and resources, such as self-esteem, morale,
and personal preferences or values.

It is this last factor which will be the subject of
this dissertation -- the influence of values on the percep-
tion of stress and the coping responses to it. But before
that discussion begins it should be noted that judging the
adaptiveness of any particular coping strategy should
ideally be made in terms of the three factors which influ-
ence coping. In other words, the effectiveness of coping
should be judged in terms of the balance between the effect
of coping on the situation, on other people, and on the per-
son (c.f. Cohen and Lazarus, 1979). Ideally, coping should
not only resolve the problem but increase the possibilities

for action and/or growth. Effective coping should enhance
not only one's own social resources, but provide models for
others who may face similar situations. Finally, it should
increase the individual's own personal resources in terms of
increasing coping skills, developing knowledge of one's
strengths and weaknesses, and enhancing self-esteem. Obvi-
ously, ideal solutions seldom exist. In order to complete a
task, sometimes personal resources must be over-extended or
others hurt, or to satisfy the needs of others sometimes a
task must be abandoned. But, in general, effective coping
will have a positive effect in all three spheres.

Values

Rationale for Studying Values

Values are but one of a group of related personality
constructs, including commitments, goals and motivational
traits (intrinsic motivation) which have been linked to
stress, coping and adaptation. How these personality con-
struct relate to these processes depends upon which con-
struct is being examined. For example, motivational traits
are seen as a source of increased vulnerability to stress.
Stressors relating to areas of high ego-involvement
(achievement or affiliation) evoke greater physiological
arousal than stressors in less ego-involved areas (Vogel,
Raymond and Lazarus, 1959).

On the other hand, commitments have been seen as a buffer against stress or as facilitative of positive adaptation. The ability to become strongly committed to a goal was one of the best predictors of successful adaptation in young people overseas in the Peace Corps (M. B. Smith, 1965). This ability to make strong commitments has also been described as one aspect of a "hardy personality" which is assumed to be stress-resistant (Kobasa, 1979). However, others have also cautioned that strong commitments may increase the appraisal of stress (Lazarus and Folkman, in press; Wrubel, Benner and Lazarus, 1981) or increase vulnerability to stress (Hinkle, 1974).

Finally, some values have been thought to be maladaptive under certain circumstances. Valuing achievement and instrumentality in old age among lower socioeconomic groups may be associated with poor life satisfaction and psychopathology (Antonucci, 1974; Clark and Anderson, 1967: Thurnher, 1974, 1975). However, this may reflect unresolved (and perhaps unrealistic) goals. Thurnher (1967) suggests that good adaptation and satisfaction with past attainments in the elderly is associated with the ability to set and achieve realistic goals. The dissatisfied elderly either could not set clear and achievable goals or were hampered by circumstances in attaining them.

All of these personality constructs -- values, goals, commitments, and "intrinsic motivation" -- are potentially

relevant as a source of individual differences in the per-
ception of and response to stress. Why, then, study values?

The distinction between values, goals and commitments
is not necessarily clearly made in the literature (M. Brew-
ster Smith, 1963). Values, however, are considered to be
more general personality characteristics which are rela-
tively stable and active in many situations (Cantril and
Allport, 1973; Feather, 1975; Kluckhohn, 1951; Klinger,
1977; Rokeach, 1973). Commitments, on the other hand,
reflect the motivational aspect of values (Kluckhohn, 1951;
Wrubel et al., 1982; Lazarus and Folkman, in press). They
are temporary states signifying the onset of pursuit of a
goal:

> The onset of the process -- that is, the event
> whereby a person becomes set to pursue a goal -- I
> shall call commitment. Thus, we may speak of peo-
> ple becoming committed to their goals. People
> presumably remain committed to their goals until
> they attain them or until they abandon them as
> inaccessible or as too costly (Klinger, 1977:37).

Thus, commitments and goals are situationally and tem-
porally specific motivational states and objectives[1].
Values, on the other hand, are underlying personality
characteristics which shape goals and commitments, usually
in conjunction with situational demands. While goals and
commitments may be more immediately relevant to stress and

1.
    Intrinsic motivation or motivational traits (Vogel
    et al., 1959) appear to be conceptually very similar
    to values, as are long-term commitments.

coping processes, they are more likely also to be influenced by situational opportunities and constraints. Values may also be responsive to long-standing environmental conditions, or their behavioral expression may be modified by the situation, but they are more clearly personality characteristics. (See Costa and Macrae, 1980, for a discussion of how underlying personality characteristics can influence temporally specific processes.) As the goal of the study is to understand how personality characteristics influence adaptive processes in a wide range of situations, the study of values is preferable to situation-specific goals and commitments.

What, then, are values and how are they assessed?

Approaches to the Study of Values

There have been many different approaches to the study of values. Gordon Allport and his colleagues (Allport, 1937, 1964; Cantril and Allport, 1933; Allport and Vernon, 1931; Allport, Vernon and Lindzey, 1951, 1960) defined values as personality traits which reflect "the relative prominence of six basic interests or motives in personality: the theoretical, economic, aesthetic, social, political and religious" (Allport, Vernon and Lindzey, 1951:1). They believed that "the personalities of men are best known through a study of their values or evaluative attitudes" (ibid). Values are stable and enduring personality traits

which are hierarchically ordered. The way Allport and his colleagues assessed values reflects these assumptions. Their measure, the Study of Values, examines preferences by requiring respondents to choose between or rank order occupations and activities. Scale items are restricted to the six types mentioned previously, and do not include many important values such as freedom, justice, honesty, courage, etc. Further, the scale ignores moderating influences which might affect the expression of values. For example, asking an individual if he prefers being social or private gives far less information than finding out under what conditions he or she prefers company or privacy.

Later approaches have broadened the conception of values from a causal personality trait interpretation to a more dynamic interaction between cognitive, affective and motivational elements. For example, Kluckhohn's definition is as follows: "A value is a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means and ends of action" (1951:395). Kluckhohn believed that values are in part cognitive in that they include a conception of what should be desired. However, they are not just beliefs about what is desirable in that they have a strong affective component as well. Finally, as we have seen, they form the basis for commitment to goals, and are thus also motivational.

Morris' (1968) conception of values was very similar to
Kluckhohn's in denoting three aspects of value roughly
parallel to cognition, emotion and motivation. His transla-
tion of this approach to values into the "Ways to Live"
Scale (Jones and Morris, 1955) includes preferred modes of
conduct as well as preferred objects. This scale involves
the rank ordering of paragraphs which depict very broad phi-
losophies toward life. For example, the paragraph which
Americans were most likely to rank first states:

> We should at various times and in various ways
> accept something from all other paths of life, but
> give no one our exclusive allegiance. At one
> moment one of them is the more appropriate; at
> another moment another is the most appropriate.
> Life should contain enjoyment and action and con-
> templation in about equal amounts. When either is
> carried to extremes we lose something important
> for our life. So we must cultivate flexibility,
> admit diversity in ourselves, accept the tension
> which this diversity produces, find a place for
> detachment in the midst of enjoyment and activity.
> The goal of life is found in the dynamic integra-
> tion of enjoyment, action and contemplation, and
> so in the dynamic interaction of the various paths
> of life. One should use all of them in building a
> life, and no one alone (Jones and Morris,
> 1955:524).

Through a series of cross-cultural studies, Morris
(1968) found that values primarily reflected broad cultural
patterns -- that is, there were more differences in rank
ordering of values between cultures than there were within
cultures. However, within each culture there were some
variations due to personality traits, religious preference,
age, sex and the size of the city or town that a person grew

up in. Curiously, there did not appear to be significant differences in rank ordering of values between different social classes.

Morris's research is very interesting but his attempt to include all aspects of value in one description results in overly broad generalizations. The paragraphs describing different values are very vague and difficult to translate into specific experiences or behaviors.

Rokeach (1973, 1975), on the other hand, separated out desired modes of conduct from end-states of existence (instrumental and terminal values). Terminal values refer to desirable end-states of existence which may be focused either on the self or on society. Salvation and peace of mind are personal values, while world peace and brotherhood are interpersonal values. Instrumental values refer to modes of conduct and include both moral values and competence values.

> Moral values refer. . .to those that have an interpersonal focus which, when violated, arouse pangs of conscience or feelings of guilt for wrong-doing. Other instrumental values, those that may be called competence or self-actualization values, have a personal rather than interpersonal focus and do not seem to be especially concerned with morality. Their violation leads to feelings of shame about personal inadequacy rather than to feelings of guilt about wrongdoing. Thus, behaving honestly and responsibly leads one to feel that he is behaving morally, whereas behaving logically, intelligently or imaginatively leads one to feel that he is behaving competently (1973:8).

Rokeach divided his Value Survey into two subscales which assess terminal and instrumental values. Each scale has 18 one or two word descriptions which are rank ordered, e.g., family security, equality for terminal values; capable, honest, loving for instrumental values.)

Thus, values have been seen as causal traits and complex interactions of cognition, emotion and motivation. They have been measured by long, philosophical paragraphs and terse one word statements. Yet, in spite of the differences between these approaches, they all have one thing in common: their measures all depend upon choosing between or rank ordering the items which are presented, as if one could value religion or science, aesthetics or practicality -- putting values in competition with one another. Indeed, Rokeach (1973:5) makes this explicit in his definition of values: "A value is an enduring belief that a specific mode of conduct or end state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence."

Clearly, some values may be more preferred than others, and values do at times compete: moral dilemmas do exist. But values are not inherently competitive. To cite a few examples, Einstein was deeply religious, physicians are often ardent music lovers, the best architects combine utility with aesthetics, and career women may derive more satisfaction from their families than non-working women (Sears

and Barbee, 1977).

This emphasis on the hierarchical structure of values has shaped research questions. First, as we have seen, much of the research has focused on the determinants of the hierarchy (see Feather, 1975; Morris, 1968; Rokeach, 1968, 1971, 1975). Second, it assumes that the structure of values is similar in all people -- that they are all rank ordered along a continuum from high to low. However, it is possible that people have different value structures, such as holding many strong values or very few and predominantly weak ones. Finally, it has de-emphasized what the meaning or consequences might be of holding a particular value.

A process approach to values would allow individuals to endorse as many or as few values as they wish without having to artificially choose between them. Rather than assuming that individuals can be characterized by one or two particular values, it is hypothesized that most individuals hold a wide range of values which affect behavior by being activated by situational demands. Only those values which are relevant to a particular situation are necessarily activated, although people may bring to a situation "hidden agendas" which are not immediately or apparently relevant. Thus, one would expect that valuing success would be more relevant to work than to family situations, although it might also be related to worries about being a successful parent.

A process approach would also allow for a clearer understanding of the relationship between values, adaptive processes and adaptive outcomes. While most theorists would maintain that values are important for individual and human adaptation as a whole, most have shied away from examining the relationship between individual values and adaptive outcomes, perhaps due to sensitivities about the cultural relativity of values and common criticisms of ethnocentrism about psychological theories of this type. Clearly, absolutes about the adaptive outcomes of values are unwarranted. However, a process orientation would allow one to carefully specify what effect a particular value had for different types of individuals in specific circumstances. Thus, rather than saying valuing x is "good" or "bad," one would say that valuing x has this effect for this individual in that circumstance, but perhaps a different effect for the same individual in a different circumstance. This approach also addresses in greater detail the source of individual differences in the perception of stress, which, as we have seen, is important in understanding the effects of stress.

Present Study

The present study represents a preliminary naturalistic exploration of the relationship between values, stress, coping and adaptation. In keeping with the process approach outlined above, it will not attempt to determine the "abso-

lute value" of values, but rather to understand (1) how the structural relationship of values relates to specific adaptive outcomes (morale and depression), (2) how individual values relate to these psychological outcomes; and (3) how values relate to the adaptive processes, namely, the perception of the sources of stress and/or positive emotions (hassles and uplifts) and coping strategies, both of which have been previously shown to relate to morale and depression (Kanner, Coyne, Schaefer & Lazarus, 1981; Kanner, 1981; Aldwin, Coyne & Lazarus, 1982).

Structural Relationship of Values and Psychological Outcomes

As mentioned previously, rank ordering of values is the assumed psychological structure of values. However, it may be that other structures are relevant for psychological outcomes. For example, holding many strong values may be related to positive morale, but holding few and predominantly weak values may be related to depression (c.f. Buhler and Massarik 1968). On the other hand, it may be that the structuring of values is less important than the particular types of values held.

Individual Values and Their Relationship to Psychological Outcomes

There are few specific predictions in the literature on how values might be related to morale and depression. Meyer (1968) and Weisskopf-Joelson (1968) have suggested that valuing caution, submissiveness and avoidance of hardships

may be maladaptive in adulthood, but offer no specific pred-
ictions. Thurnher (1975) found that life satisfaction is
positively related to interpersonal/expressive and
ease/contentment values in middle-aged men, but negatively
related to instrumental/material and hedonistic values. In
middle-aged women, on the other hand, social service and
religious/philosophical values are both negatively related
to life satisfaction. It can be inferred from this last
study that there may be sex differences in how values relate
to morale and depression, but no specific hypothesis can be
made on the basis of the current literature of the relation-
ship between values, morale and depression. Note also that
these relationships, if any, do not address the question of
why these relationships exist, or the pathways between
values and adaptive outcomes.

Values, Hassles and Uplifts

As we have seen, Lazarus and his colleagues have
predicted that values will affect how situations are
appraised with respect to harm/loss, threat or challenge --
what is perceived as a source of stress and/or positive emo-
tions (Lazarus, 1966; Wrubel, et al., 1972; Lazarus & Folk-
man, in press). Unfortunately, no assessment of primary
appraisal was available in the current study, but there are
measures of hassles and uplifts (Kanner, et al., 1980) which
are negative and positive everyday occurrences. These
scales are remarkably similar to Klinger's (1977) definition

of "current concerns" which are also thought to reflect an individual's values. Thus, if values are influencing the perception of sources of stress (and/or positive experiences), a process model of values would predict that specific values would be related to particular types of hassles and uplifts -- e.g., valuing success with work concerns, valuing affiliation with family concerns, and they should be unrelated to situations which are not conceptually relevant.

Values and Coping

As we have seen, most coping research either looks at the relationship between personality traits (presumably representing coping styles) and outcomes, or coping behavior and outcomes, but few examine the relationship between personality characteristics and coping behavior. Cohen and Lazarus (1973) found that repression-sensitization was unrelated to coping behavior. While Anderson (1977) suggested that locus of control was related to the use of problem and emotion focused coping, a more systematic study by Folkman, Aldwin and Lazarus (Note 2) found no relationship. This finding was confirmed in a British sample by Parkes (Note 3). This section of the study is an attempt to bridge a gap in the existing literature. To the extent that values include preferred modes of conduct, they should influence the type of coping strategies used. For example, valuing creativity may lead to growth-oriented coping; or

affiliation to seeking emotional support. In keeping with a process-oriented approach to values, it is hypothesized that the type of problem-situation being faced may moderate the relationship between individual values and particular coping strategies, but it is not possible to make specific predictions on the basis of the current literature, or stress and coping theory as it has thus far been articulated.

CHAPTER II: METHODS

This chapter will include descriptions of the sample studied, the measures that were used and how they were administered, and the data analysis plan.

Sample

The sample consisted of 100 middle-aged, community residing men and women participating in the Berkeley Stress and Coping in Aging Study (R. Lazarus, Principal Investigator). The overall project studied stress, coping, social support and adaptation over the course of a year (see Folkman and Lazarus, 1980; Kanner, Coyne, Schaefer and Lazarus, 1980; Coyne, Aldwin and Lazarus, 1981; DeLongis, Dakof, Coyne, Folkman and Lazarus, 1982; Schaefer, Coyne and Lazarus, 1981). The respondents were a subsample of a previous population survey conducted by the Human Population Laboratory (HPL) of the California Department of Health. HPL originally surveyed 6,928 adults in 1965; of these, 4,864 were recontacted in 1974. Criteria for the selection of the present respondents from the 1974 subject pool included: age (45 - 64), race (white), religion (Protestant or Catholic), income (greater than $7000 in 1974), education (completed at least eighth grade), and health (not bedridden). Telephone contact with 216 randomly selected subjects

from those who fit these criteria yielded 109 persons who agreed to participate in the study, roughly a 50% acceptance rate. Inquiries showed that the respondents who accepted tended to be better educated than those who refused, but they differed from the original sample only in having better incomes (see Schaefer, et al., 1981).

During the course of a year, nine respondents dropped out, leaving 52 women and 48 men, categorized into four age groups: 45 - 49 (n = 27), 50 - 54 (n = 25), 55 - 59 (n = 24) and 60 - 64 (n = 24). Most of the sample were married (n = 86), only three had never married, and 11 were divorced, separated or widowed. Seven of the men were retired; 28 of the women were employed. The respondents tended to be well-educated (mean = 13.7 years of education) and finan-cially well-off (median $20,000/year in 1974).

Procedure

The respondents were interviewed once a month for 12 months for approximately two hours and, in addition, were given some measures as homework to be completed during the interviews. Most questionnaires reported on here (see description below) were given multiple times, with the exception of the Buhler Life Goals Inventory, which was administered at month 10. The Hassles and Uplifts Scales, which assess negative and positive everyday events, were completed as homework approximately one week before each

interview for nine consecutive months, as was the Bradburn Morale Scale. The Coping Questionnaire and the Ways of Coping Checklist were administered both during the interviews and as homework up to the 9th month of the study. Thus, respondents could report up to 18 episodes over the course of 9 months, but were not required to fill out a full complement of coping questionnaires if they had not experienced that many stressful episodes. Finally, the Hopkins Symptoms Checklist was administered at months 2 and 10 of the study.

Measures

Buhler Life Goals Inventory

The Buhler (1964) Life Goals Inventory (BLGI) is a list of 91 statements describing general achievements and personal qualities which individuals may feel are important to them. Included among the statements, for example, are those which concern: being helpful, charitable, aggressive, competing successfully, having power, control, being married, having children, mastering difficulties, having an easy life, etc. Each statement is rated on a 5 point Likert scale: rejected (1), not (my) concern (2), desirable (3), important (4), or essential (5). (The data was later recoded so that the range was 0 - 4, with 0 indicating rejected statements.)

The items which reflect Buhler's "life goals" are more

similar to values than to goals in that they are general statements (e.g., be successful, advance in career) rather than specific goals (e.g., become a vice-president by age 35). Thus, they reflect the generality which is characteristic of values (see Chapter One) rather than the specificity which is characteristic of goals. The BLGI differs from other value scales in that the respondent is not required to choose between or rank order values but rather is free to endorse (or reject) as many as he or she wishes. Thus, it is suited to a process approach to values.

Hassles and Uplifts Scales

The Hassles and Uplifts Scales were designed to assess negative and positive everyday occurrences, respectively (Kanner et al., 1981). The full scales contain 117 hassle items and 135 uplift items. Respondents indicated whether each hassle or uplift occurred during the past month by rating the severity of each item: no occurrence (0), "somewhat" (1), "moderately" (2), or "extremely" (3). The scales can be scored by either frequency, a simple count of the number of items checked, or intensity, the sum of the 3-point severity ratings divided by the number of items checked. However, for most purposes, simple frequency ratings are equal or superior to intensity ratings. For example, Kanner found that frequency ratings were strongly predictive of both morale and psychological symptoms (Kanner et al., 1981).

The hassles and uplifts scales were scored according to a system of subscales developed by Kanner (1981). These assess the mean frequency of occurrence over the course of the year of hassles and uplifts in six areas: health, work, family, economic, practical (e.g., housework, errands) and setting (neighborhood conditions, the weather). The subscales have been shown to be differentially related to morale and psychological symptoms, with these relationships varying by sex and work status (see Kanner, 1981, for a description of the scales and how they were developed).

Coping Questionnaire

Various aspects of the types of problems our respondents had and how they coped with them were assessed in the Coping Questionnaire (see Folkman and Lazarus, 1980). In the first part, the respondents were asked to describe the most stressful episode which had occurred during the past month, who was involved, why the issue was important and how they coped with it. The number of episodes reported over the course of a year ranged from 4 - 18 ($\bar{x}$ = 14.75). These episodes were later categorized into four types of problems: health, work, family and other, with inter-rater reliability coefficients ranging from .86 to .97 (see Folkman and Lazarus [1980] for details of the coding procedures).

In the second part, the respondents completed a 68-item Ways of Coping checklist indicating which coping strategies

they had used in the stressful episode described in the
first part. The checklist includes a broad range of items
directed at both the problem and the attendant emotions
(Folkman and Lazarus, 1980), such as "Talked to someone
about the problem," "Made a plan of action and followed it,"
"Joked about it," "Let your feelings out somehow," "Looked
for a silver lining." The checklist was scored using the
seven subscales identified by Aldwin, Coyne and Lazarus
(1982): problem-focused, wishful thinking, help-seeking,
avoidance, growth-oriented, minimize threat, seek emotional
support, and blame self. Coping subscale scores were calcu-
lated in two ways: (1) overall, utilizing item means based
on all questionnaires; and (2) within type of problem,
averaging items within each type of problem: health, work
and family. The subscales are differentially related to the
depression subscale of the Hopkins Symptoms Checklist
(Coyne, et al., 1981) and morale (Aldwin et al., 1982).

Depression Subscale of the Hopkins Symptoms Checklist

The version of the Hopkins Symptoms Checklist used here
was the 58-item self-report scale (HSCL-58) in which five
dimensions have been reliably identified (see Derogatis, et
al., 1974). The depression subscale can distinguish between
depressed and anxious neurotic outpatients (Prusoff and
Klerman, 1974) and the checklist is sensitive to low levels
of symptomatology in normal populations (Uhlenhuth, Lipman,
Balter and Stern, 1974).

Bradburn Morale Scale

The Bradburn Morale Scale, originally a simple check-
list, was modified by asking the subjects to indicate how
frequently (0 = never, 1 = once; 2 = several times; 3 =
often) during the last week they had felt each of 10 emo-
tions (see Lowenthal, Thurnher, Chiriboga, et al., 1975).
Two subscales assessing positive and negative affect
(morale) have been reliably identified from this scale
(Bradburn and Caplovitz, 1965; Bradburn, 1969). These
scales are relatively independent and have different corre-
lates.

Data Analysis

The data analysis plan will include a description of
how the values subscales were derived and how specific
hypotheses will be tested.

Identification of Values Subscales

Subscales for the Buhler Life Goals Inventory were
developed by modifying the 120 subscales Buhler had origi-
nally developed on the basis of an unpublished factor
analysis by William Coleman (references in Buhler, Brind and
Horner, 1965). Scale modification was deemed necessary
because Cronbach's alphas for the subscales were unaccept-
ably low in this sample and some items were on as many as
four different subscales while many others had been simply

omitted. A discussion with Dr. Coleman revealed that the factor analysis had been performed on a relatively small number of clinical patients and that items had been shifted between factors for theoretical reasons even if it contradicted the factor loadings. (See Appendix A for a complete list of items and the Buhler-Coleman subscales.) Thus, a series of rational and empirical procedures was performed to clean up the subscales.

First, items which occurred on more than one subscale were assigned to only one subscale using three criteria: (1) the Buhler (1965) discussion of the four most representative items for each scale; (2) the judged appropriateness of the item for the scale; and (3) correlation coefficients between the items in question and each scale (after first deleting the item from the original scale).

Second, items which were not on Buhler Coleman's subscales were assigned on the basis of judged appropriateness for the particular subscale and further item-to-scale correlations, with the latter being the deciding factor.

Third, Cronbach alphas were calculated to determine the contribution of each item to the subscale's internal consistency. It was found that items which originally loaded negatively on the Buhler-Coleman subscales detracted from the subscales' internal consistency, and were eliminated. When positively-loaded items detracted from the subscale's

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internal consistency, correlation coefficients between the items in question and each scale were computed (after subtracting the item from the original scale) and were assigned to subscales on the basis of these coefficients. Adding new items generally changed the internal consistency for each subscale, so this procedure was repeated until all subscales had reasonable internal consistency and face validity.

Finally, a number of items were eliminated for theoretical and methodological reasons, with consultation from other members of the Berkeley Stress and Coping Project.* First items, 55, 60 and 82 all pertained to self-assessment rather than values per se, e.g., "assess my worth," and were judged to detract from a study of values. Second, three specifically political items which had been added to the scale at a later date (Buhler and Massarik, 1968) were eliminated because they were not consonant with the purposefully general tone of the other items (e.g., a specific statement such as "be elected to public office" as compared to the more general item "advance in career."

All three religious items, 51, 89 and 91, correlated very strongly (r=.65), so only item 51 was retained. Finally, a number of items were eliminated either because there was no variance in the distribution and/or because they correlated strongly with a number of the subscales and

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* Drs. Richard S. Lazarus and Susan Folkman, and Anita DeLongis.

did not sufficiently differentiate between them.

General Analytical Model

The original design of the study called for a path analysis testing the various pathways through which values might affect adaptation. It was known that both hassles and uplifts and coping were related to morale and/or depression, and it was hypothesized that values should affect both of these mediating variables. However, it was not appropriate to perform a path analysis for two reasons.

First, the values scale was not administered until the 10th month of the study, while the hassles, uplifts and coping scales were all given prior to this, making causal inference impossible. Second, there were problems with multicollinearity between both the hassles and uplifts subscales and the coping subscales, and, as we shall see, between the values subscales as well. Given this, it was decided to remain on a strictly exploratory level and utilize simple Pearson correlation coefficients. When a particular set of analyses included many computations, the significance level was set at .01 to compensate for this. Age and sex differences were assessed using two-way analysis of variance. Finally, all correlation coefficients were computed separately for men and women. Differences in order of magnitude between the correlations were assessed by Fischer's r to z transformation.

CHAPTER III: RESULTS

Introduction

The results will be presented in the following order. First, subscales of the Buhler Life Goals Inventory (BLGI) will be presented, and age and sex differences will be discussed. The next section will address the direct relationships between values and the psychological outcomes, morale and depression. Two issues will be examined: first, whether the structure of values is related to morale and depression. It is hypothesized that holding many values will be positively correlated with positive morale, whereas holding few values should be related to depression (c.f. Buhler, 1968). Alternatively, it may be that how values are structured matters less than the specific types of values held (e.g. Fiske, 1980; Meyer, 1968; Weisskopf-Joelson, 1968; Thurnher, 1975).

Next, the hypothesis that values are a source of individual differences in the perception of stress (and positive emotions) is evaluated through examination of the relationships between values subscales and particular types of hassles and uplifts. It is hypothesized that values should be related only to hassles and uplifts which are similar in content; thus, the analyses will offer a source of valida-

tion for the values subscales. These analyses will be corroborated by correlations with the types of stressful episodes reported in the coping questionnaire.

Finally, the relationships between values and coping will be presented in two parts. First, correlations between the values and overall coping subscales will be presented in order to address a gap in the existing literature on the source of individual differences in coping behavior. Coping has already been shown to be responsive to the type of problem being faced (Folkman and Lazarus, 1930; Aldwin, Coyne and Lazarus, 1982). It may be that any relationship between values and coping is due to the effect of values on perceived sources of stress (see above). Thus, the second part will present correlations between values subscales and coping within health, work and family problems. A process model of values would predict that values may relate differently to behavior in different types of situations.

Values Subscales

Eight subscales of the Buhler Life Goals Inventory were identified. These scales assess how much individuals value hedonism/comfort, affiliation, caution and conformity, creativity, prosocial values, power and success. The subscales have reasonable internal consistency (d = 75.4, range = .65 to .86).

Hedonism/comfort (d = .74) assesses valuing possessions and luxuries, being attractive and popular, and in general having an easy life, free from duties. Affiliation (d = .67), reflects concerns with marriage, children and love. Caution (d = .71) indicates the importance of being cautious and conservative, not making mistakes, living within means, and avoiding getting one's feelings hurt. Conformism (d = .80) concerns honoring parents, accepting authorities and the regulations of law and order. Creativity (d = .83), is oriented towards being adventurous, mastering difficulties, self-development, and doing creative work. Prosocial values (d = .86) involves concerns with justice, tolerance, religion, self-improvement, honesty and meaning. Power orientation (d = .65) involves leadership, power, control and aggression. Finally, success values (d = .77) include being successful, advancing in a career, finding acknowledgement and fame. A complete list of items for the scales is given in Appendix B. Table 1 gives the means and standard deviations for each subscale.

A two-way analysis of variance found no significant age differences or age by sex interactions, and only two sex differences were found, with men valuing power, f(1,87) = 10.76, p <.01, and success, f(1,87) = 9.02, p <.01, more than women. Note that there were no sex differences in valuing affiliation.

Some of the subscales show a moderate degree of correlation (see Table 2). However, it was decided not to collapse the scales further because they had different correlates and there appeared to be conceptual differences between the subscales. For example, although caution and conformity correlate highly, affiliation correlates moderately with conformity but only weakly with caution, suggesting that there may be sufficient unshared variance between the two scales. Conceptually, conformity includes mainly "law and order" items, while caution appears more similar to Buhler's (1968) notion of self-limiting adaptation (see Appendix B for subscale items).

Values and Psychological Outcomes

The analyses in this section examine the direct relationship between the values subscales and the psychological outcomes of positive and negative morale (Bradburn, 1965) and the depression subscale of the HSCL-58 (Derogatis, et al., 1974). The analyses contrast Buhler's (Buhler, et al., 1965) hypothesis that holding many strong values should be related to positive morale and holding few and relatively weak values to depression, with the hypothesis that values may be differentially related to morale.

Contrary to Buhler's prediction, overall strength of commitment (as measured by summing the subscale scores), was not significantly related to either morale or depression.

However, there were significant (at the .05 level or better) and differential relationships between the subscales and the psychological outcome measures for the sample as a whole. Valuing creativity was mildly related to positive morale, whereas valuing caution was mildly related to depression. Valuing hedonism/comfort, however, was weakly correlated with both positive morale, p <.05, and depression, p <.01 (see Table 3).

Table 3 also contains the correlations repeated separately for each sex, which reveals some interesting differences and may explain why the hedonism/comfort subscale appears to be related to both positive morale and depression. For men, valuing hedonism was significantly (p<.05) related to positive morale, but not to depression; for women, it was significantly (p<.01) related to depression. Also, valuing caution appears to be more related to depression for men than for women.

Men may value power and success more than women, but it appears to be unrelated to their morale. But for women, positive morale is significantly related (at the .05 level or better) to valuing success, power and creativity.

Thus, overall strength of commitment appears to be unrelated to morale or depression, but there are differential relationships between three of the subscales and morale and depression for the sample as a whole. When the correla-

tions are calculated separately for each sex, more relation-
ships appeared, often in opposite directions, and the
strength of the correlations increased. However, sample
size in these analyses is small, and these sex differences
should be viewed with caution. Fischer's r to z tests for
the significance of the difference between these correla-
tions show that even the largest difference in this set of
analyses, the 37 point difference between men and women's
correlations between hedonism/comfort and depression at
month 10 only approached significance ($z = 1.89$, $.1 < p$
$<.05$). Replication with a larger sample size is needed.

Values, Hassles and Uplifts

The values subscales were correlated with the hassles
and uplifts subscales, which measure the average frequency
of different types of negative and positive everyday events
over the course of a year. For the most part, the correla-
tions were in the expected directions (see Table 4). For
example, valuing success was significantly ($p<.01$) corre-
lated only with work uplifts (although work hassles
approached significance), and valuing affiliation was signi-
ficantly related only to family uplifts. Creativity and
prosocial subscales were virtually unrelated to hassles or
uplifts, whereas the power subscales, and, to a lesser
extent, hedonism/comfort, showed significant correlations in
almost all areas. (Valuing power may be an indirect measure
of general engagement -- see Singer, [1974].) Valuing

conformism was correlated significantly only with "setting" hassles, which include concerns about crime, neighborhood deterioration and events in the news. Valuing caution was related to setting and health hassles.

When correlations were calculated by sex, the relationships between values, hassles and uplifts were found to be much stronger for men, even though the sample size was effectively halved, and much weaker for women (see Table 5). Simply counting the number of significant correlations at the .01 level or stronger, men had 26 such correlations, whereas women had only three. For women, hedonism/comfort was significantly (p <.01) related only to health hassles and uplifts, and to family uplifts. The bulk of the significant sex differences (as well as strong correlations) for the men occurred with the caution and conformity subscales, which strongly correlated with hassles and/or uplifts in virtually every area.

Remembering that caution was significantly related to depression, one interpretation of Table 5 might be that valuing caution, and, to a lesser extent, conformity in middle aged men might render them vulnerable to experiencing widespread hassles. The absence of a relationship between caution and work and family uplifts is especially noteworthy. (It may be that the relationship between conformity and depression does not reach significance because the former is strongly correlated with family uplifts, and
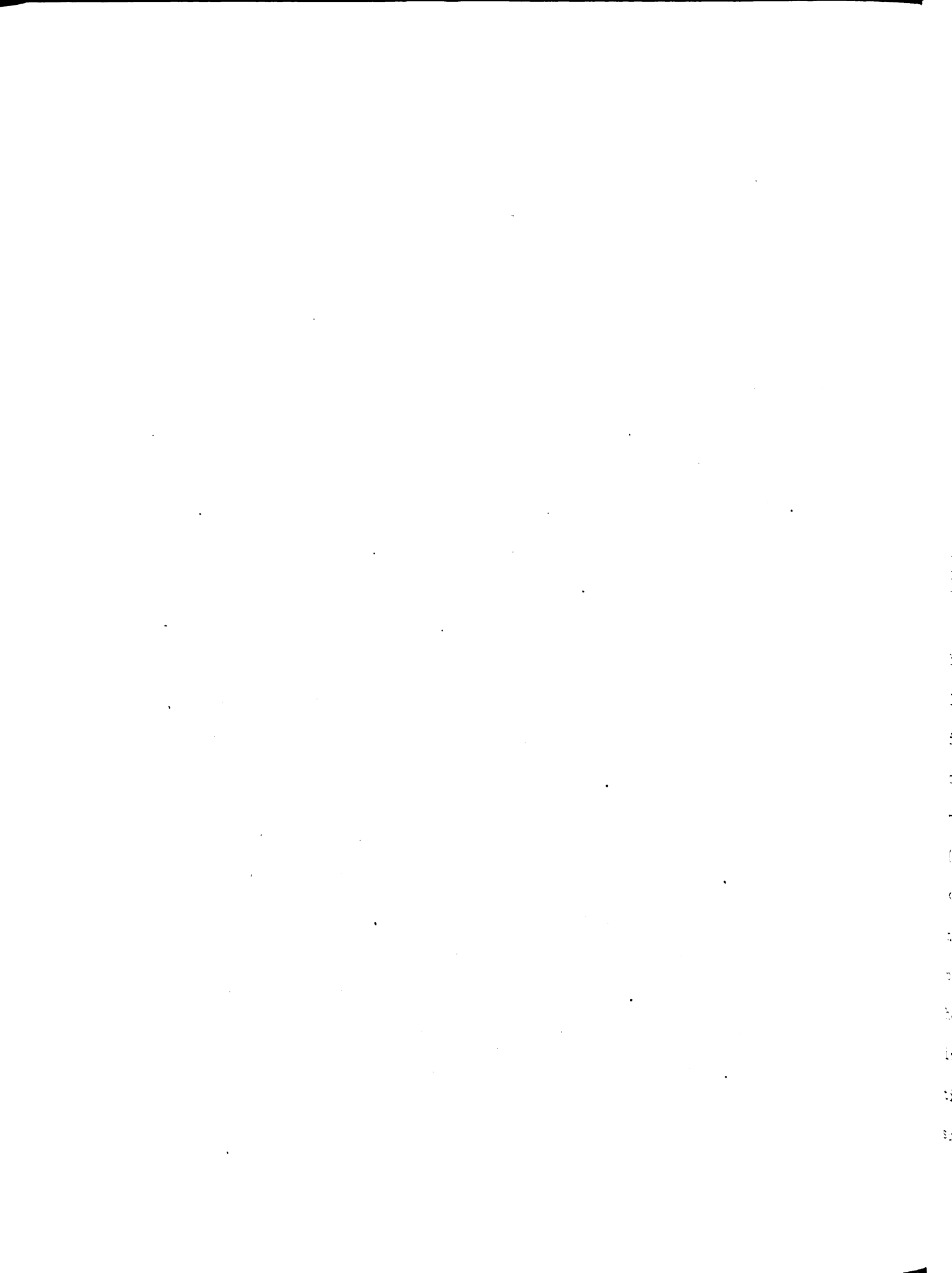
not correlated with health hassles.) An alternative
interpretation might be that valuing caution and conformity
reflects difficult life circumstances.

In short, values do appear to relate moderately and in
a meaningful fashion to what is perceived as a source of
stress and/or positive emotions. From these analyses it is
not possible to determine the causal direction, but one
could speculate that it is most likely bi-directional, with
values sensitizing people to certain types of experiences,
which in turn reinforce or modify values.

Values and Stressful Episodes Reported in the Coping Questionnaire

As a partial corroboration for the relationships
between values and hassles, the values subscales were corre-
lated with the types of stressful episodes (health, work and
family) discussed in the coping questionnaire. The patterns
of results were reasonably similar. The number of work
problems discussed was significantly related to both power
($r(93) = .21$, $p < .05$) and success values ($r(93) = .23$, $p
< .01$), and the number of family problems discussed was sig-
nificantly related to affiliative ($r(94) = .20$, $p <.05$) and
prosocial values ($r(96) = .20$, $p <.05$). Unlike reporting
health hassles, discussing health problems in the coping
interviews was not related to hedonism, and it was nega-
tively correlated with both power ($r(93) = -.19$, $p <.05$) and
success values ($r(93) = -.23$, $p <.01$). Thus, while the gen-

eral pattern between surveys of problems and discussion of problems is similar, there are enough differences to warrant caution in future research in equating the two.

Values and Overall Coping

Table 6 presents the relationships between the values subscales and overall coping. Although valuing creativity was unrelated to hassles or uplifts, it was significantly related (p <.01) to two types of coping strategies: problem-focused and growth-oriented coping. Caution, however, was significantly related (p <.01) to minimizing threat, wishful thinking and help-seeking/avoidance, while hedonism (p <.01) was moderately associated with wishful thinking, help-seeking/avoidance, minimizing threat and blaming self. Thus, valuing creativity, caution and hedonism did seem to affect choice of coping strategies.

The relationship between values and the psychological outcomes, morale and depression, may be partially explained by the association between values and coping. For example, both problem-focused and growth-oriented coping are strongly related to positive morale (Aldwin, et al., 1982). Given that creativity is related to both of these types of coping and positive morale, it seems reasonable to hypothesize that coping forms a pathway between values and morale.

Similarly, the coping factors of wishful thinking, minimizing threat, and blaming self are related to negative

morale and/or depression (Aldwin, et al., 1982; Coyne, et al., 1981), and thus may partially account for the association between depression and valuing caution and hedonism.

Table 7 revealed nearly the opposite pattern of values, hassles and uplifts correlations: values appear to be more strongly related to coping for women than for men. While there were only three correlations at the .01 level for men, there were seven for women. At the .05 level, there were 7 correlations for men and 21 for women.

Examining the correlations at the .01 significance level or better, valuing creativity and success in women is related to growth oriented coping, but not in men, which might help explain why these value subscales are related to positive morale in women, but not in men. Conformity in women, while unrelated to hassles and uplifts, does relate to wishful thinking and minimizing threat, but not in men. Curiously, while women in general are more likely to seek emotional support (Aldwin, et al., 1982), emotional support seeking is significantly related to valuing hedonism/comfort in men but not in women (see Table 7).

The relationships between values and coping appear consonant with their previously determined relationships to the psychological outcomes, and it is tempting to conclude that coping may form a pathway through which values affect adaptation. However, once again, these analyses do not lend

themselves to determining causal direction, and it is possible that coping strategies used may determine an individual's values. Most likely it is bidirectional.

Values and Coping within Type of Stressful Episode

It may be that the relationship between values and coping is itself indirect. Choice of coping strategy has been shown to vary according to type of stressful episode being confronted (Folkman and Lazarus, 1980; Aldwin et al., 1982), such as health, work and family problems, and we have previously seen that values are related to what is perceived as stressful. Rather than simply partialing out the variance due to type of stressful episode, however, it was decided to control for this source of variance by correlating values within each type of stressful episode to test the usefulness of the process-oriented approach to values (and personality variables in general) discussed in Chapter One. One would predict that values would be related to behavior only in situations relevant to that particular value; and that the situation would modify the relationship between personality characteristics and behavior. In other words, that values may lead to different rather than the same coping behaviors in different situations.

At first glance, there appears to be little relationship between values and coping within health, work and family problems, suggesting that the previous relationships

between values and overall coping may be indirect. Only two correlations reach significance at the .01 level: the positive correlation between valuing affiliation and growth-oriented coping with family problems, r(88) = .24, p <.01, and the negative correlation between creativity and blaming self for health problems r(77) = -.28, p <.01. However, when the correlations are calculated separately for each sex, a very different picture emerges. Again, there are many more significant correlations for women and their magnitude is greater. For women, there are 17 positive correlations significant at the .01 level or better; for men, there are only six, four of which are negative (see Table 8).

Table 8 suggests three interesting principles. First, values relate differentially to coping behavior, even when controlling for type of problem. In other words, values may be a source of individual differences for both the perception of what is stressful and, independently of this, for how it is managed. For example, the affiliation and caution subscales relate to different coping strategies with family problems. Affiliation relates to problem-focused coping, whereas caution is associated with minimizing threat. Second, a particular value may be related to (coping) behavior only in relevant types of problem areas. Valuing power and success are related to coping only in work situations, and then only with help-seeking/avoidant behavior in

women (r = .55 and .53, respectively). <u>Third, a given value may relate differently to coping behavior in different cir- cumstances.</u> For example, in women, valuing affiliation is strongly related to problem-focused coping with family prob- lems, but to wishful thinking and minimizing threat with work problems.

Summary

Eight subscales of the Buhler Life Goals Inventory were identified. There were no age differences, but men valued power and success more than women.

Values were differentially related to hassles and uplifts. For example, valuing success was significantly related only to work hassles and uplifts, whereas valuing affiliation was significantly related to family uplifts.

When these correlations were calculated separately within each sex, it appeared that hassles and uplifts were more strongly related to values for men than for women. The bulk of the sex differences appeared with the caution and conformity subscales, which suggests that valuing caution and conformity may mean very different things for men than for women (see Chapter 4).

Values were also related to the choice of coping stra- tegies. Interestingly, the creativity subscale was the only one which was related to problem-focused and growth-oriented

coping. The other subscales were more related to various emotion-focused coping categories, such as valuing caution with minimizing threat and wishful thinking. Correlations calculated within each sex revealed sex differences in the opposite pattern from those in the hassles and uplifts sub-scales. Values appeared to be more strongly related to coping for women than for men. Thus, although there did not appear to be many differences in the distribution of values between men and women, there were differences in what values related to for men and women. For men, values were more related to the perception of sources of stress and positive emotions; for women, they were more related to how they coped with problems.

Finally, a process model of values was upheld. The expression of values was modified by situational demands. Some values were related to coping behavior only in specific situations, while others related differently to different coping patterns in different situations.

TABLE 1

MEANS AND STANDARD DEVIATIONS
FOR THE VALUES SUBSCALES

Subscale	Mean	Standard Deviation
Hedonism/Comfort	27.9	4.5
Affiliation	20.3	2.8
Caution	23.3	4.7
Conformity	16.4	3.8
Creativity	39.2	5.7
Prosocial	52.3	6.3
Power	12.5	2.7
Success	17.9	3.5

TABLE 2

VALUE SUBSCALES INTERCORRELATIONS

	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) Hedonism/Comfort	.17	.52	.33	.18	.23	.38	.49
(2) Affiliation		.15	.47	.48	.56	.18	.19
(3) Caution			.61	.16	.36	.27	.34
(4) Conformity				.32	.55	.27	.34
(5) Creativity					.63	.50	.44
(6) Prosocial						.17	.14
(7) Power							.63
(8) Success							

TABLE 3

VALUES AND PSYCHOLOGICAL OUTCOMES

	Depression (Mo. 2)			Depression (Mo. 10)			Positive Morale		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Hedonism/Comfort	.20*		.28*	.27**		.46**	.22*	.27*	
Affiliation									
Caution	.22*	.33*		.23*	.26*				
Conformity									
Prosocial									
Creativity							.21*		.29*
Power									.25*
Success									.34**

* p < .05
** p < .01

TABLE 4

VALUES, HASSLES AND UPLIFTS

	Health		Work		Family		Economic		Setting		Practical	
	H	U	H	U	H	U	H	U	H	U	H	U
Hedonism/Comfort	.29**	.40***	.04	.12	.09	.21*	.05	.31**	.37***	.34*	.24**	.32***
Affiliation	.09	.00	.04	-.08	-.0	.35***	.02	.00	.07	.03	-.01	.07
Caution	.29**	.18*	.02	.00	.07	.08	.16	.13	.32***	.15	.12	.13
Conformity	.15	.22*	.10	.03	.05	.21*	.16	.20*	.30**	.20*	.12	.03
Creativity	.03	.01	.21	.10	.08	.17	.06	-.01	.07	-.01	.05	.11
Prosocial	.04	.01	.03	-.09	.03	.12	.02	.01	.09	.04	.09	.10
Power	.20*	.37***	.24**	.29**	.04	.19*	.26*	.32***	.26**	.25**	.18*	.24*
Success	.14	.18*	.17	.29**	.02	.14	.14	.15	.13	.18*	.03	.13

* p < .05
** p < .01
*** p < .001

TABLE 5

SEX DIFFERENCES IN THE RELATIONSHIPS BETWEEN VALUES, HASSLES AND UPLIFTS

	Health		Work		Family		Economic		Setting		Practical	
	H	U	H	U	H	U	H	U	H	U	H	U
Hedonism/Comfort (m)	.24	.37**	.02	.14	.08	.15	.08	.41**	.48***	.41**	.31*	.43**
(f)	.38***	.42***	.05	.09	.11	.26*	-.02	.21	.23	.25*	.17	.20
Affiliation (m)	.14	.08	.16	.06	.15	.50***	.28*b	.06	.16	.23	.06	.21
(f)	.04	-.06	-.08	-.18	-.12	.23	-.24*	-.23*	-.01	-.16	-.07	-.05
Caution (m)	.42**	.41**b	.26*c	.03	.32*b	.11	.32*b	.41***c	.62***c	.45***c	.47***c	.38**b
(f)	.12	-.04	-.30*	-.06	-.13	.06	-.09	-.17	-.04	-.14	-.19	-.11
Conformity (m)	.16	.47***b	.33**	.22	.38**b	.44**b	.34**a	.43***b	.45***	.50***c	.24*	.42***b
(f)	.17	.03	-.14	-.13	-.16	.06	-.03	.02	.16	-.03	.03	.03
Creativity (m)	-.01	-.01	.28*	.08	.21	.27*	.16	.04	.17	.21	.14	.23
(f)	.04	.00	.05	.03	-.03	.09	-.17	-.10	-.14	-.09	-.04	-.03
Prosocial (m)	.04	.10	.22	.05	.23	.31*a	.17	.19	.22	.28*b	.23	.32*b
(f)	.09	-.06	-.15	-.16	0.14	-.04	-.08	-.13	-.03	-.23	-.04	-.12
Power (m)	.14	.25***	.21	.31*	.14	.28*	.19	.32*	.41**b	.39	.28*	.42***
(f)	.18	.28*	.13	.14	-.02	.14	.19	.30*	-.01	.17	.12	.11
Success (m)	.04	.21	.10	.17	-.13	.13	.03	.05	.19	.26*	.04	.23
(f)	.19	.16	.15	.25*	.16	.18	.11	.19	-.05	.17	.06	.07

* p < .05
** p < .01
*** p < .001

a Difference between sexes .10 < p < .05
b Difference between sexes p < .05
c Difference between sexes p < .01

TABLE 6

VALUES AND OVERALL COPING

	Problem Focused	Wishful Thinking	Help-seeking/ Avoidance	Growth	Minimize Threat	Seek Emotional Support	Blame Self
Hedonism/ Comfort	.18*	.23**	.32***	.12	.27**	.14	.23**
Affiliation	.09	.01	-.03	.12	.03	.05	.11
Caution	.12	.27**	.23*	.08	.30**	-.05	.09
Conformity	.11	.12	.08	.22*	-.13	.03	.03
Creativity	.29**	.15	.21*	.25**	.13	.14	.02
Prosocial	.07	.22*	.12	.21*	.21*	.04	.07
Power	.20*	.05	.24**	.02	-.00	-.03	-.02
Success	.15	.04	.15	.02	.09	-.04	.07

* p < .05
** p < .01
*** p < .001

TABLE 7

Sex Differences in the Relationship Between
Values and Overall Coping

		Problem Focused	Wishful Thinking	Help-Seeking/ Avoidance	Growth	Minimize Threat	Seek Emotional Support	Blame Self
Hedonism/ Comfort	(m)	.25*	.23	.39**	.09	.27*	.39**[b]	.18
	(f)	.08	.23	.25*	.17	.26*	-.09	.28*
Affiliation	(m)	-.05[a]	-.06	-.16	-.03	-.12	.05	.02
	(f)	.29*	.08	.09	.24*	.19	.04	.20
Caution	(m)	.18	.15	.36**	.19	.16	.24[b]	.18
	(f)	.02	.36***	.10	.05	.43***	-.24*	.02
Conformity	(m)	.07	-.13[b]	.04	.29*	-.05[a]	.04	-.02
	(f)	.15	.33	.13	.21	.32**	-.25*	.08
Creativity	(m)	.21	.09	.17	.13[a]	.05	.16	-.17
	(f)	.36*	.22	.29*	.49***	.23*	.28*	.21
Prosocial	(m)	.09	.07	.04	.15	.18	.04	-.13[a]
	(f)	.10	.39**	.21	.22	.27*	-.07	.26*
Power	(m)	.13	.03	.25*	-.02	-.12	.15	.00
	(f)	.16	.05	.24*	.23	.09	.05	-.08
Success	(m)	.02	-.02	.15	-.18[c]	.01	.16	-.01
	(f)	.21	.09	.21	.36***	.17	.03	.14

* p < .05
** p < .01
*** p < .001

[a]Difference between sexes .10 < p < .05
[b]Difference between sexes p < .05
[c]Difference between sexes p < .01

TABLE 8

Sex Differences in the Relationships Between
Values and Coping Within Type of Problem

		Problem-Focused			Wishful Thinking			Help-Seeking/Avoidant		
		Health	Work	Family	Health	Work	Family	Health	Work	Family
Hedonism/ Comfort	(m)	-.01	.15	.07	-.05	.06	.14	-.07	.01	-.06
	(f)	-.12	.05	.17	.19	.33*	.02	-.12	.34*	-.00
Affiliation	(m)	-.02	-.10	-.03^b	-.34*	-.09^b	-.05	-.02	-.27*	-.01
	(f)	.25*	.27	.41**	-.04	.47**	.03	.16	.13	.06
Caution	(m)	-.02	.12	-.09	.07	.09	.29*	-.13	-.11	-.03
	(f)	-.05	-.11	.22	.03	.01	.08	.02	-.00	.06
Conformity	(m)	-.03	-.11	-.26*^{c}	-.10	.18	-.08	-.12	-.22	-.20
	(f)	.16	.15	.31*	.14	.17	.14	.17	.09	.14
Creativity	(m)	-.04	-.29*	-.15^b	-.37*^{c}	-.18^b	-.22	-.10	-.18^b	-.08
	(f)	.21	.10	.34**	.28*	.42*	.14	.11	.36*	.12
Prosocial	(m)	-.01	-.26*	-.11^b	-.34*^{b}	-.15^b	-.04	-.17	-.22	.02
	(f)	.07	.09	.35**	.12	.31*	.19	.11	.18	.13
Power	(m)	-.11	.07	-.02	-.28	-.01	.02	-.33*	-.15^c	-.18
	(f)	.08	.16	.05	.13	.22	-.07	.08	.55***	.05
Success	(m)	.11	-.16	-.03	-.17	-.09	-.22	-.09	-.26^c	-.10
	(f)	.12	.22	.13	.24	.26	.13	.12	.53***	.17

^{a}Difference between sexes   .10 < p < .05
^{b}Difference between sexes   p < .05
^{c}Difference between sexes   p < .01

*   p < .05
**   p < .01
*** p < .001

TABLE 8 (Continued)

	Growth			Minimize Threat			Seek Emot. Suppt.			Blame Self		
	Hlth	Work	Fmly	Hlth	Work	Fmly	Hlth	Work	Fmly	Hlth	Work	Fmly
Hedonism/Comfort (m)	.05	.10	.02	-.05	-.23	-.19[b]	-.05	.27*	.05	-.01	-.12	.17*
(f)	-.03	.09	.20	.30*	.23	.31*	-.25*	.13	-.24*	.12	.14	.04
Affiliation (m)	-.18[b]	-.11	.05	-.50***[c]	.23	-.46***[c]	-.19	-.09	-.01	-.19	-.10	.13
(f)	.34**	.28	.39**	.26*	.55***	.10	.17	.34*	.07	.07	.00	.05
Caution (m)	-.00	-.22	-.05	-.19	-.22	-.13[c]	-.01	.14	-.07	.10	.19	.39**[a]
(f)	.14	-.04	.20	.09	.26	.49***	-.12	.08	-.12	-.14	-.08	.02
Conformity (m)	-.21[c]	-.19	-.21[c]	-.14	-.29[b]	-.17[b]	-.14	-.03	-.04	-.02	-.09	.38**[b]
(f)	.44**	.05	.36**	-.00	.15	.27*	.05	.06	-.05	-.06	-.20	-.14
Creativity (m)	.03	-.14[b]	-.12[c]	-.23[c]	-.18[b]	-.22	-.11	.00	-.05	-.54***[b]	.02	-.02
(f)	.32*	.36*	.43***	.34**	.43**	.14	.02	.28	.15	-.00	.00	.22
Prosocial (m)	-.06[a]	-.02	-.11[c]	-.43**[b]	.20	-.21	-.14	.11	.10	-.37*[a]	.00	.17
(f)	.34**	.29	.43***	.03	.31	.21	.07	.14	.03	-.04	-.27	.12
Power (m)	-.02	-.05	-.16	-.15	-.19	-.16	-.17	.13	-.02	-.30*	-.01	.16
(f)	.10	.10	.09	.14	-.07	.09	-.15	.33*	-.08	-.04	-.08	-.10
Success (m)	.16	-.06	.00	-.14	-.12	-.04	-.11	-.01	-.08	-.20	-.10	.03
(f)	.22	.29	.27*	.22	.22	.17	-.19	.11	.02	.33	-.15	.10

[a] Difference between sexes .01 < p < .05
[b] Difference between sexes p < .05
[c] Difference between sexes p < .01

* p < .05
** p < .01
*** p < .001

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CHAPTER IV: DISCUSSION

While it has been recognized for some time that there
are individual differences in response to stress, little is
actually known about how personality characteristics influ-
ence the mediators of stress -- namely, coping behaviors and
the perceptions of stress. This study has shown that the
types of values individuals hold are related to the types of
hassles and uplifts they experience and report, and also to
differences in how they cope with a variety of problems.
Furthermore, it has shown that personality variables are not
necessarily consistently related to behavior in diverse set-
tings, highlighting the need for a process approach to the
study of personality, stress and coping in which the context
is taken into account.

As mentioned previously, this study was exploratory in
nature, its aim primarily to sketch out the relationships
between values, stress and coping. Even still, there were
some unexpected findings which require further discussion.

Age Differences

The lack of age differences in values in this sample is
puzzling. Jung ([1933] 1978) hypothesized a sex-linked
shift in values across the lifespan, with women becoming

more mastery-oriented in later life and men becoming more expressive- or family-oriented. This shift has been demonstrated by Lowenthal, Thurnher, Chiriboga et al. (1975). (See also Gutmann, 1977; Ryff, 1979, 1982.) However, an analysis of variance showed that there were no age by sex interactions.

It is likely that the age-spread (45 - 65 years old) was simply not sufficient to demonstrate any age-related changes in a middle- to upper-middle class sample. While some of Lowenthal et al.'s respondents were roughly parallel in age, they were primarily lower-class people, who tend to demonstrate age-linked changes earlier than middle- or upper-middle class people -- see Neugarten and Hagestad, (1976). Moreover, Buhler (1968) has suggested that values may be relatively stable in middle age, with changes in values occurring both earlier and later.

It is interesting, moreover, that while middle-aged men may still value power and success more than women, it was only for women that valuing power, creativity and success was found to be related to positive morale. Perhaps this sex difference is indicative of an impending shift in value orientation which is just beginning in those women who may be returning to work after raising children.

Sex Differences

In many ways, the pattern of sex differences in this
study is the most interesting finding, one that was not
clearly predictable. Men with women differed only slightly
in what they valued, and these differences being predictable
from standard socialization theories (e.g., Bem, 1974; Par-
sons and Bales, 1955). The main differences were rather in
how common values were expressed in the behavior and experi-
ence of men and women. For men, values were associated pri-
marily with the content of hassles and uplifts; for women,
they were related to type of coping strategies used. There
is little in the literature which can explain this unex-
pected finding. However, Rubin (1976) has argued that trad-
itional women's roles leave them little room for decision-
making or control over the types of problems they must
manage (see pp. 104-108). Similarly, Gove and Hughes (1979)
have recently suggested that women have more role obliga-
tions than men. Thus, their activities are constantly
structured by their obligations to their homemaking duties,
spouses, children and often parents as well.

If true, this might partially explain the sex differ-
ences in patterns of values, hassles, uplifts and coping. If
men are more able than women to control their environments
and/or the types of problems they must manage, then it is
reasonable to expect that the types of hassles and uplifts
men report would reflect their value preferences to the

extent that they select the type of environment they prefer[1]. If problems in the environment can be prevented or avoided, subsequent coping efforts would become less important. Thus, they might not reflect value preferences to any great extent. If, on the other hand, women are less able to determine the types of problems they must manage, value preferences would be less likely to be reflected in the content of hassles and uplifts, but would be related to coping. This is exactly what was found.

An example might help clarify this. The men in our study would often state in the coping interviews that they let their wives handle certain problems such as an unruly daughter or sick baby. If the problem became too aversive, the men would simply leave the house. The role obligations of the women, however, would not allow them to simply avoid these types of problems, and they managed them as best they could.

Obviously no one has total control over his or her environment or experience, the issue is one of _relative_ control. This was reflected in the data. Values were not totally unrelated to hassles and uplifts in women, or to coping in men, but rather the number and strength of the relationships differed between the sexes.

1.
   See the following discussion on values and person-environment fit.

The hypothesis that men in this sample might have more control over the types of problems they must deal with can be supported by other findings from the Berkeley Stress and Coping Project. For instance, Folkman and Lazarus (1980) found that women were more likely to appraise situations as requiring their acceptance. These authors thought that this might be due to differences in the types of problems women faced. It might also be due, however, to the possiblity that women feel less control over the occurrence of problems. In the Folkman and Lazarus study, men used more problem-focused coping than women, even in situations appraised by them as requiring acceptance (Folkman and Lazarus, 1980).

Utilizing data from the Berkeley Stress and Coping Project, Kanner (1981) found that hassles were more strongly related to symptomatology in women than men. As Glass and Singer (1972) have shown, feeling in control of an event renders it less stressful. If women indeed feel that they had less control over the occurrence of their hassles, they might be more strongly affected by them. This is also concordant with Seligman's (1974) suggestion that women may feel more helpless in the face of a stressful event.

Finally, Kanner et al. (1981) observed that uplifts were related to positive morale for men but not for women. A study by Reich and Zautra (1981) may help clarify this. They found that positive experiences only buffered the effects of stress when people felt that they had control

over the experience -- that they were responsible for the
event's occurrence. Perhaps the association between uplifts
and positive morale for men reflects a feeling of responsi-
bility for the uplift's occurrence, and the absence of a
relationship for women reflects perceived lack of responsi-
bility.

Clearly these interpretations are speculative and much
systematic research is needed before they can be accepted.
If the hassles and uplifts scales included an assessment of
perceived responsibility, uplifts which the respondents felt
arose from their own actions should be more strongly related
to positive morale than those which were perceived as for-
tuitous. Similarly, in this way one could test whether men
did feel that they had more control than women over the
occurrence of hassles, as speculated above.

One could also compare the relationship between values,
hassles, uplifts and coping in women with few role obliga-
tions and those with many. If the hypothesized explanations
for the sex differences in the present study are true, the
pattern of values, hassles, uplifts and coping in women with
few role obligations should more closely resemble the male
pattern. The hypothesis that social roles may moderate the
expression of values and the experience of stress is suffi-
ciently interesting to merit replication and further inves-
tigation.

Values and Person-Environment Fit

Questions remain as to whether values and commitments create vulnerabilities which could lead to experiencing increased stress, or whether they form a buffer against stress, either in the form of a source of positive experiences or perhaps by giving meaning to an individual's life, warding off the anomie and anhedonia of which Maslow (1959) spoke. Arguments could be made from the literature for both directions (see Chapter I), and it may well be that values are a double-edged sword (c.f. Wrubel et al., 1931).

In this sample, values were related to both hassles and uplifts, but, on the whole, the relationship to uplifts appeared to be stronger. Of the 26 correlations at the .01 level or better in men, 17 were between values and uplifts, while 9 were between values and hassles.

Discussing the work of Holland (1973), Feather (1975) argues that values influence the type of environments that individuals select to live and work in, that people take on "agreeable problems and roles" when they can. When there is a good fit between the person's values and the environment, one should find more satisfaction and achievement than when the fit is poor. This appears to be the case with at least the men in the present research sample. While values may be associated with increased vulnerability to stress, this appears to be more than counterbalanced by their relation-

ship to sources of positive experiences.

Whether a particular value results in increased vulner-
ability to stress or guards against it may depend upon how
well an individual can select an environment to fit his or
her values and/or modify the values to fit the environment.

> Values may be regarded as either viable or dys-
> functional, dependent on the ease with which they
> can be translated into goals and behavior and suc-
> cessfully pursued. The viability of a given
> action will be affected by both extrapersonal and
> intrapersonal factors (Thurnher, 1975:184).

Also, Vogel et al. (1959) found that subjects whose behavior
did not match their motivational pattern (e.g., students
with low grades who strongly valued achievement) were most
likely to be physiologically aroused when confronted with a
stressor which related to their motivational pattern.
Ideally, a comprehensive study of the relationship between
values, hassles and uplifts would take into account the
environmental and personal resources available to the indi-
vidual. For example, the relationship between valuing
hedonism/comfort   and   depression for women in this
study may be more related to some women not having the com-
forts or pleasures which they desire. Similarly, the
widespread finding in elderly populations, mentioned previ-
ously, that valuing achievement and success is related to
poor adaptation (Antonucci, 1974; Clark and Anderson, 1967;
Thurnher, 1975) may not apply to elderly statesmen, judges
or entrepreneurs, for whom achievement and success may be

more readily attainable. Thus, a particular object value may lead to positive or negative outcomes depending upon the personal and environmental resources available to fulfill goals stemming from that value.

It can be argued, however, that values as preferred modes of conduct may directly lead to adaptive or maladaptive coping styles independently of the environmental or personal resources available. In other words, if a particular value led consistently to poor coping strategies (i.e., wishful thinking), one would be justified in concluding that that particular value is maladaptive. However, as we have seen, values, as assessed in this study, are not consistently related to any one coping strategy, but rather relate to different strategies depending upon the situation.

This finding can also be understood in the context of person-environment fit. For example, valuing affiliation in women was significantly related to problem-focused coping only with family problems; with work problems it was related to minimizing threat. Perhaps people are more likely to use problem-focused coping in problems arising from preferred roles or environments -- problems that they feel more comfortable in managing. In other words, women who value affiliation may be comfortable in dealing with family problems, so it is easier to use problem-focused coping. However, these same women may be less comfortable dealing with work problems, so they are more likely to use an avoidant

strategy (minimizing threat). Thus, it is hypothesized that a value will lead to a positive coping strategy when it is part of a good person-environment fit.

However, a value may detract from a good person-environment fit if it leads to a poor coping strategy. For example, caution in men is related to self-blame and wishful thinking in coping with family problems. Not surprisingly, caution in men is also related to family hassles, but not uplifts. More systematic research is needed into how values can facilitate or detract from the fit between a person and his or her environment.

Comments on the Methodology

Sample Limitations

The sample size was a major limitation of this study. The subscale structure of the Buhler Life Goals Inventory needs to be replicated with a larger sample utilizing, perhaps, factor analytic or clustering techniques, which the current sample size did not readily permit. In addition, a study with an increased sample size might better determine whether the sex differences in the relationship between values and morale and depression, which in this study only approached significance, are genuine.

Other aspects of the sample limit the generalizations that can be drawn from this study. The sample was white,

with relatively high incomes and education levels, and
included only a restricted age range. As Thurnher (1975)
points out, values appear to have different correlates with
life satisfaction in different age groups, and the relation-
ships between values, morale and depression may also vary
depending upon the resources available to people at dif-
ferent stages of their lives. There may also be cultural
differences in how values relate to psychological adaptation
and/or coping behavior. Thus, more data is needed from dif-
ferent age and ethnic groups.

Ranking Versus Rating Values: Structural Concerns

One of the central concerns of this study was to deter-
mine the effect of the structure of values on adaptive out-
comes. It was felt that rank ordering values obscures
differences in the structure of individual value system --
that some people may hold many strong values, while others
may hold only a few relatively weak ones. However, the
structure of values was less important to psychological out-
comes than was hypothesized. High total scores were unre-
lated to positive morale, and low total scores were unre-
lated to depression. The absence of the relationship to
positive morale may have been because the values which did
individually relate to positive morale may have been can-
celled out by those which related to depression. A study
which used combined scores from those subscales which
related to positive morale separately from those which

related to depression may have yielded different results as to the importance of the structure of values. A more systematic study comparing ranked as opposed to rated values is needed.

Rokeach (1973) has argued that ranking values has two advantages. First, forcing individuals to rank order values appears to minimize the influence of social desirability. Kelly, Silverman and Cochrane (1972) asked individuals to rank terminal values twice: first using standard instructions and then using "social desirability" instructions, in which the respondents were told to arrange the values in a manner that would make them appear "most favorably in the eyes of the experimenter." There was no relationship (rho = .09) between the rankings in the two conditions.

Social desirability was not examined or controlled for in this study. Allowing individuals to endorse as many values as they wish may may not minimize social desirability influences. The lack of any relationship between prosocial values and any of the other variables in the study may be indicative of a spurious or social desirability response for this value subscale.

Second, rating values provides an ipsative rather than a normative assessment. It is impossible to tell if individuals are using the same standards when they say that a particular value is very important to them. (See also Allport,

1937.) However, the same argument can be made against any
scale which involves rating rather than ranking. However,
as Rokeach (1973) admits, most studies employing ranked
values use the data in a normative fashion, so any advantage
of an ipsative design is lost.

Rating values rather than ranking them allows a more
complex understanding of how values related to everyday con-
cerns and behavior. Studies using ranked values often end
up characterizing groups or individuals by the value which
was ranked most strongly (e.g., Morris, 1968). However, as
we have seen, different values may be operative in different
circumstances. This is lost when people are characterized
by only one or two values, and it appears preferable to
allow the multifaceted nature of value systems to be
expressed in ratings of individual values.

However, correlating "independent" values separately
with various mediators or outcomes also has disadvantages.
A large number of relationships are generated which are dif-
ficult to interpret. Also, information about the effect of
combinations of values is lost. For example, there may be
differences in choice of coping strategies between women who
value both affiliation and success highly and those who
value affiliation and caution highly.

Now that more information about the correlates of the
individual values subscales is known, future research can

utilize an approach which generates typologies based upon clustering values. This would allow the use of analytic techniques based on comparison between groups, which would simplify analysis. This might also constitute a better test of the hypothesis concerning the structure of values. A group of people who hold few values could be contrasted with a group characterized by unusual strength of values. A process approach which emphasized the importance of the context could still be used by contrasting the behavior of different groups across situations.

Further Concerns

The last major difficulty with the study is that the Buhler Life Goals Inventory (BLGI) was not administered until after all of the hassles, uplifts and coping questionnaires had been administered. Ideally, a personality inventory used in conjunction with multiple administrations of other scales should be given both at the beginning of the study and at the end. This would provide for a more causal determination of the direction of the influence between values and hassles, uplifts and coping, as well as information about the reliability and stability of this values inventory, which is currently unavailable. However, the similarity of the relationship between values and depression at both months 2 and 10 suggest that the BLGI may be reasonably stable.

Concluding Comments

A major gap in the stress and coping literature has been the lack of research on personality variables which affect the perception and mediation/moderation of stressful events. While personality theorists and clinicians have attempted to relate personality characteristics directly to psychological and/or physical outcomes, few have looked at how they are related to actual behavior and experience in a naturalistic setting. This study has addressed that gap. It has demonstrated that personal values are related to an individual's psychological well-being at least in part because they are linked with what is perceived as stressful (or positive), as well as relating to choice of coping strategies.

The findings in this study may have implications for other issues as well. For example, the pattern of sex differences found in this study may be relevant to a current problem in health psychology: why symptomatology is higher in women, but morbidity is higher in men (see, e.g., Gove and Hughes, 1979; Marcus and Seeman, 1981). If men are more able to control the types of problems they face than women are, they might be able to avoid unresolvable and more stressful problems, thus perhaps having fewer symptoms. However, it might also mean that men develop less skill in coping with events over which they have little control. Thus, when faced with such problems (e.g., loss of spouse,

retirement) they may be at a loss for how to cope, and be at higher risk. This might be reflected in the high suicide rate for retired, widowed men (Miller, 1978) and the increased male susceptibility to major diseases in general (Verbrugge, 1976). Women, on the other hand, may develop more skill in handling unavoidable problems. Thus, in later life, they may be able to adapt better to losses over which they have little control.

Another neglected area in the stress and coping literature is the influence of culture on what is perceived as stressful and the strategies used for coping with problems. As values appear to be a mediating pathway between the culture and the individual, they may be an important explanatory variable if there are cross-cultural differences in the perception of stress and preferred coping strategies.

Finally, Maslow (1959) stated the real need for research into the functioning of value systems at a time in history when moral concerns may be of utmost importance. It is hoped that this study may contribute in some small fashion to the knowledge of the importance of human values.

APPENDIX A

Life Goals Inventory

1. Have necessities of life

2. Be accepted in contacts

3. Go ahead, try things, be enterprising

4. Have worthy beliefs, values

5. Be aware, understanding

6. Be a leader when I feel qualified

7. Work for my political party

8. Be successful, get concrete rewards

9. Satisfy my appetites or impulses

10. Have sex satisfaction

11. Advance in career

12. Be glamorous

13. Have a good disposition

14. Be helpful, charitable

15. Compete successfully

16. Belong to groups (friends, family, organizations)

17. Increase knowledge, pursue interests

18. Have power, control

19. Dedicate myself to causes

20. Find acknowledgement, praise

21. Be resourceful, confident

22. Have means, possessions

23. Please people, be liked, popular

24. Give and receive love

25. Have play, sports, travel

26. Be married

27. Have children

28. Do creative work

29. Accept limitations

30. Forget myself over others

31. Be well organized

32. Secure survival

33. Gain status, improve my position

34. Be attractive

35. Be tolerant

36. Have much less leisure time

37. Have no duties, complete freedom

38. Always do the best I can

39. Contribute my share

40. Leave a mark behind me

41. Stand for fairness and justice

42. Be adaptive, easy-going

43. Be cautious, conservative

44. Assess my conscience (peace of mind)

45. Do honor to my parents

46. Explore new possibilities, be adventurous

47. Have comfort, luxury

48. Accomplish things in life

49. Accept authorities (school, church, political)

50. Master difficulties, overcome dangers, problems

51. Live in God

52. Work to convert people to right ways of thinking

53. Have things my way

54. Assess my worth

55. Evaluate my contributions

56. Accept the regulations of law and order

57. Try to improve things

58. Help my country surpass others

59. Accept denials and frustrations

60. Assess results of my life

61. Have an easy life without problems

62. Strive toward total fulfillment

63. Develop best potentials (self-realization)

64. Have complete security

65. Want to fight for political convictions

66. Be sensitive to others' needs

67. Submit to others' wishes

68. Be aggressive

69. Play role in public life

70. Give at times free expression to my feelings

71. See competitors fail

72. Avoid dangers and failures

73. Avoid getting my feelings hurt

74. Never be unkind

75. Keep to myself and remain uninvolved

76. Try to resolve my problems

77. Be highly regarded and elected to offices

78. Develop myself as a person

79. Take advantage of opportunities

80. Resign myself to misfortunes

81. Not make mistakes

82. Evaluate success or failure

83. Be honest with myself and others

84. Make name for myself, have fame

85. Determine my goals clearly

86. Always hope for the best

87. Give meaning to my life

88. Live always within my means

89. Live within the teachings of my religion

90. Have a leisurely retirement

91. Live with a concern for the hereafter

Buhler-Coleman Subscales

I. Need Satisfaction
    A. Necessities of Life, Pleasure
        1. Have necessities of life
        2. Satisfy any appetites or impulses
        3. Have means, possessions
        4. Have play, sports, travel
        5. -Have much less leisure time
        6. -Be honest with myself and others

    B. Love and Family
        1. Belong to groups (family, friends, organizations)
        2. Give and receive love
        3. Be married
        4. Have children
        5. -Keep to myself and remain uninvolved

    C. Sex Satisfaction
        1. Have sex satisfaction
        2. Be glamorous
        3. Find acknowledgement, praise
        4. Please people, be liked, popular
        5. Be attractive
        6. Have comfort, luxury

II. Self-Limiting Adaptation
    D. Accept Limitations, Caution
        1. Accept limitations
        2. Forget myself over others
        3. Secure survival
        4. Be cautious, conservative
        5. Accept denial, frustrations
        6. Resign myself to misfortunes
        7. -Make a name for myself, have fame

    E. Submissiveness
        1. Belong to groups (family, friends, organizations)
        2. Be well organized
        3. Always do the best I can
        4. Acceptance of authorities (school, church, political)
        5. Submit to others' wishes
        6. Always hope for the best
        7. Live in God
        8. Accept the regulations of law and order
        9. Have much less leisure time

    F. Avoidance of Hardships
        1. Find acknowledgement, praise

2. Have means, possessions
3. Please people, be liked, popular
4. Have an easy life without problems
5. Have complete security
6. Avoid dangers and failures
7. Avoid getting my feelings hurt
8. Not make mistakes
9. Never be unkind

III. Creative Expansion
    G. Self-development
1. Go ahead, try things, be enterprising.
2. Have worthy beliefs, values
3. Be resourceful, confident
4. Do creative work
5. Explore new possibilities, be adventurous
6. Accomplish things in life
7. Master difficulties, overcome dangers, problems
8. Strive toward total fulfillment
9. Develop best potential (self-realization)
10. Be sensitive to others' needs
11. Try to resolve my problems
12. Develop myself as a person
13. Be honest with myself and others
14. Determine my goals clearly
15. Be aware, understanding

    H. Leader, Fame, Power
1. Be accepted in contacts
2. Be leader when feel qualified
3. Have a good disposition
4. Compete successfully
5. Increase knowledge, pursue interests
6. find acknowledgement, praise
7. Have things my way
8. Satisfy any appetites and impulses
9. Have power, control

    I. Role in Public Life
1. Dedicate myself to causes
2. Be aggressive
3. Play role in public life
4. Make name for myself, have fame
5. Be highly regarded and elected to offices

IV. Upholding the Internal Order
    J. Moral Values
1. Contribute my share
2. Assess my conscience (peace of mind)
3. Master difficulties, overcome dangers, problems
4. Evaluate my contributions

5. Assess results of my life
6. Evaluate success or failure
7. Determine my goals clearly
8. Assess my worth

K. Social Values
1. Have a good disposition
2. Dedicate myself to causes
3. Forget myself over others
4. Be tolerant
5. Always do the best I can
6. Contribute my share
7. Stand for fairness and justice
8. Try to improve things
9. Be sensitive to others' needs
10. Never be unkind
11. Be helpful, charitable

L. Having Success
1. Be successful, get concrete rewards
2. Advance in career
3. Compete successfully
4. Have means, possessions
5. Please people, be liked, popular
6. Do creative work
7. Leave a mark behind me
8. Gain status, improve my condition
9. Accomplish things in life
10. Make a name for myself, have fame

APPENDIX B

Values Subscales

Hedonism/comfort

09. Satisfy any appetites and impulses
22. Have means, possessions
23. Please people, be liked, popular
25. Enjoy play, sports, travel
34. Be attractive
37. Have no duties, complete freedom
47. Have comfort, luxury
61. Have an easy life without problems
90. Have a leisurely retirement

Affiliation

10. Have sexual satisfaction
24. Give and receive love
26. Be married
27. Have children
66. Be sensitive to others' needs

Caution

30. Forget myself over others
43. Be cautious, conservative
59. Accept denials and frustrations
67. Submit to other's wishes
73. Avoid getting my feelings hurt
80. Resign myself to misfortunes
81. Not make mistakes
88. Live always within my means

Conformism

45. Do honor to my parents
49. Accept authorities (school, church, political)
52. Work to convert people to right way of thinking
56. Accept the regulations of law and order
58. Help my country surpass others

Creativity

03. Go ahead, try things, be enterprising

17. Increase knowledge, pursue interests
19. Dedicate myself to causes
28. Do creative work
46. Explore new possibilities, be adventurous
48. Accomplish things in life
50. Master difficulties, overcome dangers, problems
62. Strive toward total fulfillment
70. Give at times free expression to my feelings
78. Develop myself as a person
85. Determine my goals clearly

Power Orientation

06. Being a leader when I feel qualified
18. Have power, control
53. Have things my way
68. Be aggressive
71. See competitors fail

Social Values

04. Have worthy beliefs, values
05. Be aware, understanding
14. Be helpful, charitable
31. Be well organized
35. Be tolerant
39. Contribute my share
41. Stand for fairness and justice
42. Be adaptive, eas-going
51. Live in God
57. Try to improve things
83a. Be honest with myself and others
86. Always hope for the best
87. Give meaning to my life

Success Orientation

08. Be successful, get concrete rewards
11. Advance in career
15. Compete successfully
20. Find acknowledgement, praise
40. Leave a mark behind me
84a. Make a name for myself, have fame

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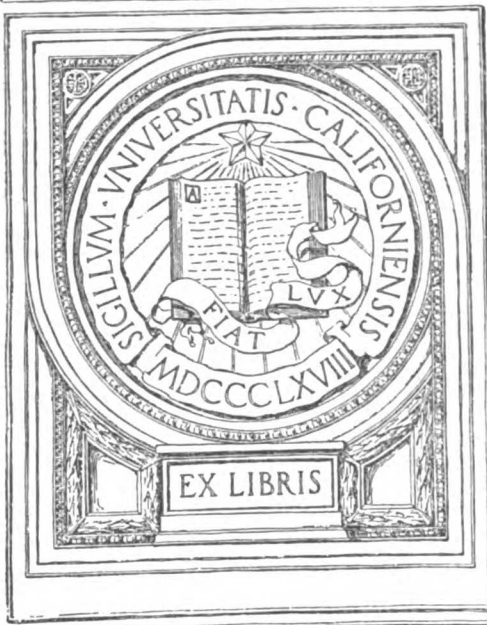1976.

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