AN EXPLORATORY DATA ANALYSIS OF THE EARLY ADULT DEVELOPMENTAL STAGES

BY

GWENDOLYN C. HENDRIX

B. A., University of Missouri - Kansas City, 1965

A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1977

Approved by:

Margery A. Neely
Major Professor

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ABSTRACT

Respondents (n=00) were divided into two groups for the purpose of constructing a scale to discriminate among individuals in and not in a particular life stage (LS) as defined by existing literature, Life Stage 2, and cross-validating the results using the Omnibus Personality Inventory (OPI). Al respondents completed an Adult Developmental Items (ADI) form and a demographic data sheet. Split-half reliability scores were calculated for each LS. The Spearman-Brown correction yielded reliability scores of .76 for LS1 (n=92), .70 for LS2 (n=85), and .82 for LS3 (n=91). One group (n=49) were asked to make brief written responses concerning the relationship of specific activities, interpersonal and family relationships, and emotions in their own lives. These respondents were than assigned to one of three life stages (LS1, LS2, or LS3) by three independent judges. A reasonable estimate of inter-rater reliability was demonstrated by comparing observed agreement among judges to statistical probability ($p<.01$) and by use of the Monte Carlo simulation which demonstrated that agreement among three judges on 46 or more of 49 observations would be expected only 4 times in 1000. A regression analysis was run to determine the amoqnt of the originally calculated LS score that could be accounted for in terms of total positive response frequency (the proportion of total responses marked true across all three life stages). An item discrimination analysis was performed using a point biserial correlation procedure. This resulted in 22 items being retained to construct a LS2 scale. The correlation coefficients of the items retained were significant at the .05 level using a one-tailed test. The ADIs of the Structured Survey Questionnaire (SSQ) group were rescored using the scale composed of the 22 items retained. Mean LS2 scores differed

significantly ($p<.05$) between LS1 and LS2 respondents. LS3 was omitted from this test due to an insufficient N. The newly constructed LS2 scale was used to score ADI responses of the OPI group (n=50). A correlation procedure was computed to determine the relationship between LS2 scores and scores on each of the OPI scales used in the study (eight scales). A test of significance supported the research hypotheses about the direction of OPI scale scores for LSs in all eight cases, five of which were significant (4 cases $p<.10$, 1 case $p<.01$). The major stated goal of the research, development of a scale that would discriminate among individuals in and not in LS2, appeared to occur. In addition, two forms of cross-validation procedures appeared to provide support for research results.

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An Exploratory Data Analysis of the Early Adult Developmental Stages

The concepts of developmental psychology are certainly not new to the general field of psychological theory. Contributions to the body of knowledge of human psychological development are abundant. Among others, Adler (1932), Bayley (1949), Erikson (1950), Freud (1920), Gesell (1928), Havighurst, Robinson, and Dorr (1946), Shirley (1933), and Piaget (1932), did much to expand theory and knowledge in this area.

For a considerable period of time, the idea that an individual's psychological development (e.g., personality) was completed by early adolescence was commonly accepted (Adler, 1932; Freud 1920). Though it has been shown since the time of Freud that adolescence is a period of dynamic and vital growth, post-adolescent personality was seen by many developmental psychologists during this period as stable and unchanging except as individuals exhibited personality dysfunction (Freud, 1920).

Although much has been done in the area of developmental theory, little attention has been paid to adulthood until the last decade. A notable exception to this is Erikson (1957, 1959). In his work, Erikson (1957) theorized that identity (i.e., personality) formation is a lifelong development largely unconscious to the individual and his society. Later, his work on the eight stages of human development deals with ontogenetic change in the adult years (Erikson, 1959).

There appear to be several tenets or principles basic to developmental theory (Erikson, 1959; Kaluger and Kaluger, 1974). The first is that development follows a definite, orderly, sequentially predictable pattern.

Second, development comes from both maturation (physical) and learning. Third, although all individuals follow a definite pattern of growth and development, each person has an individual style. Finally, each developmental phase or stage has characteristics that are typical of that phase. Although these principles appear to have been derived from observations of groups, they have been applied to individuals as well as groups.

More recently, research has been done in the area of adult development. Brim (1976), Gould (1972), Kaluger and Kaluger (1974), Neugarten (1964, 1968, 1976), and others have added significant support and breadth to Erikson's developmental theory. However, as the earlier developmental theorists concentrated almost exclusively on the period from infancy to early adolescence, so these later theorists and researchers have concentrated primarily on the period from midlife (35-45) on. These two foci, infancy through adolescence and middle adulthood through aging, leave the period between late adolescence and middle adulthood, approximately ages 18-32, relatively unexplored, even though many changes appear to take place during this time (Kimmel, 1974; Rappoport, 1976; Sheehy, 1976).

Possible reasons for the paucity of information on this age group may include the following: subjects are not readily available, even if they were available they might be reticent or refuse to participate, and they may not show significant differences in development based on the four factors hypothesized to make manifest behavioral change across life stages. These factors are the interior sense of self in relation to others, the proportion of safeness to danger one feels, the perception of time, and an intuitive shift in feelings of aliveness or stagnation (Erikson, 1959; Sheehy, 1976). These will be discussed further in the Review of the

Literature Section.

Attempts to observe and study these factors that purportedly generate different feelings and behaviors in the ontological process have, in general, studied only one of the factors in isolation from the other three. This type of approach does not allow for possible interactions among the factors. Further, the independent researchers have neither consistently defined the factors nor used comparable methodologies (Bortner and Hultsch, 1972; Braley and Freed, 1971; Gould, 1972; Hultsch and Bortner, 1974; Neugarten and Associates, 1964; Okun and Siegler, 1976; Ryff and Baltes, 1976; Schaie, 1970). The results of these studies varied in that some supported the notion of personality differences and reorganizations across ontogenetic change and some did not.

The basis for this work is found primarily in Erikson's (1959) stages of human development. Erikson's theory requires a psychology not only of the first or last part of the life span, but a psychology that integrates all parts of the life span so that each developmental stage is seen both in relation to and as a function of other stages.

The global focus of this work, then, is to examine adult behavior from the perspective of developmental stages in adulthood. Developmental tasks and ontogenetic changes appear to retain some consistency across time and authors in the literature. Erikson (1959), Gould (1972), Havighurst (1953), Kaluger and Kaluger (1974), Levinson, Darrow, Klein, Levinson, and McKee (1976), Neugarten (1976), Pikunas (1969), and Vincent and Martin (1961) show general consensus of developmental stages and ontogenetic changes throughout the life span of human beings. The concepts and theories supported by these authors have been summarized by Sheehy (1976)

in a volume reporting some of her own findings and hypotheses concerning adult development. The terminology used in this work will be that used by Sheehy.

The specific focus of this work will study the first three stages of adult development described in Sheehy (1976). Analysis of data gathered from the research samples is hypothesized to be generally representative of the populations which constitute these three life stages. Information gathered from respondents in these three stages by means other than projective tests and open-ended interviews will provide useful information about the early years of adult development. Such information as that, provided by this study, should be pertinent to the development of techniques and theoretical constructs for dealing with a given population (i.e., adults). Further, it should provide progressive measures in dealing with discreetly identifiable subgroups within the population with which counselors work.

Review of the Literature

The subject of adulthood in the field of developmental psychology has, by and large, received little attention until the last decade. Probably the most notable exception to this is the work of Erikson (1959) on the stages of human development. He considers the last three stages of development to be the stages of adulthood. The first stage of adulthood is Intimacy and Distantiation versus Self-Absorption. It represents the success or failure in one's ability to be truly open and capable of a "trusting relationship" rather than separateness or pseudointimacy. This is the task to be resolved by young adults in this stage before they work

on the next stage.

In the next stage of adulthood Generativity versus Stagnation, theorized by Erikson to span roughly the mid-20's on, the individual must establish a continuing giving of the self to one's world in a creative, caretaking, participatory way that is progressive. This activity is necessary in order to avoid stagnation, which is an undefined or diffused sense of purpose.

The final stage, Integrity versus Despair and Disgust, includes the span from later adulthood to death. In this stage, Erikson theorizes that one perceives and accepts one's own life as "one's one and only life cycle." This is not necessarily a fatalistic approach, but rather a decision to make the most of what one has.

Erikson's descriptions of these life phases in adulthood are quite brief. When they are compared to his fuller, previous work on childhood, one finds support for the position that adulthood as a topic was really just emerging. If viewed from the total perspective of adult development literature, certainly Erikson's work is consistent with others' since it provides the basis for emphasis primarily on the periods of middle adulthood on at the expense of early adulthood. Erikson has conceptualized the quandaries thematic of adulthood while emphasizing the more global perspective adulthood as part of the series of phases extending throughout the life span.

The work of Neugarten (1964, 1968) has tended to concurrently support and expand Erikson's theoretical framework by further refining the stages of adult development. The methodology used was in-depth, structured interviews of a large cross-sectional sample in the Kansas City Studies of

Adult Life. In some instances, interviews were supplemented by projective test data from the Thematic Apperception Test (TAT).

Neugarten found that adults appear to go through distinctively different phases or stages. Each of these stages is characterized by the feelings, thoughts, activities, and experiences dominant during that particular time. Since the study concentrated on subjects age 40 and older, the greatest impact on refinement of life stages was in the areas of middle adulthood and older adulthood. Where Erikson hypothesized the existence of two very broadly defined stages, Neugarten described at least four: young adulthood, approximately ages 20-40 (which was not studied); middle adulthood, approximately ages 40-55; older adulthood, approximately ages 55-65; and the aging, approximately ages 65 on.

Further findings by Neugarten indicated developmental differences appeared to exist by sex and socioeconomic level; that is, women and men appeared to be characterized by different activities and feelings at different ages and people of different socioeconomic levels seemed to be characterized by different activities and feelings. Of the studies conducted, significant and consistent age differences emerged in those studies where the investigator's attention was on issues such as the perception of self vis-a-vis the external environment and coping with impulse life. These findings appeared where the subjects' statements and resolution of such issues were assessed on the basis of projective test responses.

While Neugarten has made a significant contribution to the understanding of adult development, she, like her predecessors, has added very little to the understanding of the span between late adolescence and middle

adulthood. Contributions by Neugarten and her associates notwithstanding the absence of studies in the literature cause the author to believe this span has been subjected to a paucity of research (Kimmel, 1974).

Gruen (1964) defined Erikson's eight stages of ego development as personality variables. He then operationalized these variables by devising a ten point rating scale for each one by dichotomizing the two component states assigned by Erikson to each phase.

Ratings were made on the basis of interview data for respondents 40 to 70+ years of age. The interview contained fifty-five open-ended questions covering attitudes about such things as job, social status, plans for the future, use of leisure time, health, present age and aging, marriage and the marriage partner, religion, death, friendship patterns, the expression of various emotional states, awareness of changes in self over the years, and a general evaluation of life.

The highest correlations among the eight dimensions were generally those occurring between adjacent dimensions, that is, those assumed by Erikson to be chronologically adjacent in the developmental process. Gruen's results tend to bear out, to some extent, Erikson's assumptions of the stages in development and of the influence of earlier ego solutions on subsequent ones. However, the dimensions that, according to Erikson's theory, were seen as most salient in adult personality development did not yield many significant group differences. The indication of Gruen's work was, at least within the age range of his sample, that there were no major group differences by age, sex, or social class. This finding according to Gruen would tend to put the major emphasis of personality dynamics, as expressed within the last four of Erikson's dimensions, on individual

factors of development rather than generalized developmental stages.

Although Gruen's work does not lend as much support to Erikson's theory as that of Neugarten, it provides incentive to continue research in the field by some of its more contradictory findings. A more critical concern from the point of view of this study is that it does not address the span between late adolescence and middle adulthood.

Sheehy (1976) presents what appears to be the most completely developed work to date in the area of adult developmental psychology. Sheehy's conceptualization of the "predictable crises of adult life" emerged from her own collection of 115 "life story" interviews and discussions with people such as Dr. Daniel Levinson, Yale; Dr. Roger Gould, U.C.L.A.; and Dr. Margaret Mead.

Adult development is postulated by Sheehy to include six distinctively different periods or stages. The initial stage, which Sheehy calls "Pulling Up Roots", is the time of transition from late adolescence to young adulthood. During this period, the emphasis is primarily on establishing one's identity and preparing for a future career. This stage is also characterized by periodic "rebounds" back to the family from temporarily unsuccessful attempts to establish one's self in the world. This stage spans approximately ages 18-21.

The next stage is the "Trying Twenties", spanning approximately ages 22-28. During this stage the individual begins to shape a vision of "Self", prepare for life work, form the capacity for intimacy, engage in initial thoughts of marriage and a family of one's own, and to do what is expected, "should be".

The stage following the "Trying Twenties" is "Catch-30", spanning approximately ages 29-32. During this stage the individual begins feeling narrow and restricted, periodically feels the urge to "break out," feels like new choices in one's life must be made and commitments altered or deepened, and rebalances the relative importance of shoulds/wants.

The next stage is "Rooting and Extending" and spans approximately ages 32-35. During this period, the emphasis is on "making it"; converting one's dreams into concrete goals and achieving them. This is the period of ascendance of wants over shoulds. Life appears to become more rational and orderly.

Following the "Rooting and Extending" stage is what Sheehy calls the "Deadline Decade", spanning approximately ages 35-45. This stage is commonly referred to as the period of mid-life crisis. It is the stage during which the individual perceives the "time squeeze". It is a time individual re-examines previously established purpose and priorities. The individual perceives this stage as the time when one reaches one's "prime", but this is overshadowed by a "full-out" identity crisis.

The final stage discussed by Sheehy is what she calls "Renewal or Resignation" and spans approximately ages 45-50. During this stage the individual achieves a new stability. If the individual experienced a "mid-life crisis' this period brings a new awareness, new interests, and redefined identities. If no "mid-life crisis" was experienced, Sheehy's work predicts it will probably occur at approximately age 50. Sheehy postulates that it is in this stage that one, at last, gains approval of one's self. Emergence from this stage leaves the individual feeling better about one's life space even though one has less physical

time than before.

Unlike previous work, Sheehy has addressed the span between late adolescence and middle adulthood. However, the methodology used does not lend itself to objective data analysis which is a concern of the present study.

In Erikson's work (1959) no attempt was made to elaborate on the broadly defined stages of adult development beyond the initial theoretical conception of such stages. Erikson encouraged others to "flesh out" his broad, conceptual framework of adult developmental stages.

Efforts by Neugarten (1964, 1968) and Gruen (1964) to do this have dealt exclusively with people from middle adulthood through aging adults. Further, these studies appear to have been based on the assumption that chronological age ranges were accurate indicators of specific life stages. Data were then collected using open-ended interview questions, which allow for considerable projective interpretation, and in the case of Neugarten, the use of projective test responses, to either confirm or refute this assumption. The data tended generally to support the assumption. As a result, they were interpreted to reflect the characteristics associated with specific chronological age ranges, or life stages.

While Sheehy (1976) included respondents from the early adulthood life stages in her study, she also used open-ended interview questions which allowed considerable potential for projective interpretation. According to Sheehy, her respondents were middle class, professional people, a disproportionate number of whom were married couples.

An underlying purpose of the present study was to add to the existing knowledge and understanding of adult developmental theory by

providing additional data for the three early adult developmental stages. Therefore, the primary objective was to develop a scale to discriminate among adult life stages. Resources required the researcher to focus on one particular life stage and attempt to determine whether individual respondents were or were not in that life stage, rather than trying to discriminate among all adult developmental stages.

The formal research hypotheses for this study were:

H_1: There is a relationship between assignment of a respondent to LS2 by the three judges and the responses of the same individual to the Adult Developmental Items (ADI) exhibited by respondents assigned to LS2 by the judges answering:

a. LS1 items false

b. LS2 items true

c. LS3 items false.

H_2: A respondent with a high ADI LS2 score will score as follows on the OPI scales used in this study:

TI - low, Co - high, Au - low, RO - average, IE - low, PI - high, AL - high, and RB - high.

In addition, the following research questions were considered:

a. Do males and females in the same chronological age range score differently on the ADI?

b. Are the mean chronological ages for each LS age range described by Sheehy different from the mean ADI LS ages?

c. Do married and signle people of the same chronological age range score differently on the ADI?

d. Do married people with children and married people without children of the same chronological age range score differently on the ADI?

Possible limitations of the present study include the size of the sample studied and the probable homogeneity of the sample. These factors affect the generalizability of the results of the present study.

METHOD

Subjects

The population from which subjects were sampled was North American full or part-time students enrolled at Kansas State University during the spring semester, 1977. Kansas State University, a land-grant institute of higher education, is located in the mid-central United States, in the northeastern part of the state of Kansas. The student body is composed of people from various ethnic and cultural heritages, including both United States and foreign students. The United States students are predominantly from farm, rural, or small town backgrounds.

Since the major goal of this study was to validate an objective method of classifying individuals into life stages, it was not known at the time a respondent entered the study in which life stage they would be categorized. However, it was desirable to have approximately one-half of the subjects be ultimately categorized in the central life stage being studied, the "Trying Twenties", and one-fourth each in the adjacent life stages, "Pulling Up Roots: and Catch-30". This was desirable in order to make comparisons between respondents in the "Trying Twenties" versus respondents not in the "Trying Twenties" with approximately the

same number of respondents in both groups.

Since it is obvious that a rough linear relationship between life stage and chronological age, exists, age was used as an aid in trying to obtain the desired sampling proportions. Sheehy (1976), who deliberately limited her study to the middle class, suggested that the "Pulling Up Roots" life stage generally occured between ages 18 to 21, the "Trying Twenties" between ages 22 to 28, and the "Catch - 30" stage between ages 29 to 32.

It was anticipated that full-time graduate students would exhibit characteristics different from Sheehy's respondents of the same chronological age because of their probable difference in life experiences. It was desirable, then, to have at least half of the respondents sampled in the central LS, 22 to 28 year age range, who were not full-time students. The danger here was that if too many respondents sampled in the 22 to 28 year range were ultimately classified in the "Pulling Up Roots" stage, then the sample of those in the "Trying Twenties" stage would be too small for meaningful study.

Sheehy (1976, P. 15) states that "...men and women are rarely in the same place struggling with the same questions at the same age." This statement supports the desirability of sampling equal numbers of males and females at each level. Sheehy interviewed couples, singly and together. As a result, her suggested age ranges for each life stage may, or may not, also be valid for single persons. This consideration makes it desirable to sample equal numbers of single men, married men, single women, and married women at each age level.

In summary, a desirable number of respondents would be at least 160. Distribution of respondents was proposed as outlined in Table 1.

Table 1

Proposed Distribution of Respondents

	age group	female married	male married	female single	male single	total
Life Stage 1	18-19	5	5	5	5	20
	20-21	5	5	5	5	20
Life Stage 2	22-23	5	5	5	5	20
	24-26	10	10	10	10	40
	27-28	5	5	5	5	20
Life Stage 3	29-30	5	5	5	5	20
	31-32	5	5	5	5	20
	Total	40	40	40	40	160

Respondents were recruited from classes of consenting instructors. Respondents for the 18 to 21 age range were recruited from undergraduate courses. Respondents for the 22 to 28 and 29 to 32 age ranges were recruited from both undergraduate and graduate level classes. The announcement read to the classes appears as Appendix A.

The respondents were apprised of their rights in an experiment requiring the use of human subjects. Respondents were asked to read and sign a Statement of Informed Consent outlining their rights and indicating voluntary agreement to participate in this research project. This treatment of respondents was in accordance with the requirements of the Kansas

State University College of Education Committee on Human Subjects and the K.S.U. President's Committee 8290. A copy of the Statement of Informed Consent appears in Appendix B.

Materials

Exploratory data analysis was conducted using (1) Adult Developmental Items (ADI) which were marked true or false by each respondent, (2) Omnibus Personality Inventory (OPI), Form F, items which were marked true or false by one-half of the respondents, (3) written structured survey questions (SSQ) which were answered by the other half of the respondents, and (4) demographic data consisting of sex, chronological age, educational classification, employment information, current marital status, information regarding children, and cultural background (Appendix J). Materials used in the data collection are described in the order listed above.

The Adult Developmental Items, referred to hereafter as ADI, consist of matched pairs of statements reported by Sheehy (1976) as exhibiting characteristics of a particular life stage (LS). There were 12 matched pairs for each LS. The statements refer to the first three adult developmental stages discussed by Sheehy. These stages are "Pulling Up Roots" (LS1), "Trying Twenties" (LS2), and "Catch-30" (LS3). Throughout the remainder of this work these life stages will be referred to as LS1, LS2, and LS3 respectively. These matched pairs of statements were comprised of concepts taken from Sheehy. The concepts were either quoted verbatim from the source or paraphrased by the researcher. Items were arranged on the ADI Form so that one-half (36) of them were randomly placed on the first part and the other half were randomly placed on the second part.

Each item in the ADI was designed so that an answer of true indicated that the respondent exhibited a characteristic of a particular life stage. In this manner, each item was classified as belonging to one of the three stages in this study. This identification is shown, along with the items, in Appendix E. Scoring procedures and statistical analyses of ADI responses are discussed at length in the Data Analysis section.

All respondents were asked to read each statement in the ADI and decide whether the item was true or mostly true for her/him or False (F) if the statement was false or not usually true for her/him. Detailed instructions to respondents appear in Appendices C and D.

"The Omnibus Personality Inventory (OPI), Form F, was constructed to assess selected attitudes, values, and interests, chiefly relevant in the areas of normal ego functioning and intellectual activity." (Heist and Yonge, 1968, p.1). According to Heist and Yonge (1968, p.3) the major purposes of the OPI were: (1) to provide a meaningful, differentiating description of students and (2) a means of assessing change. In line with these purposes Treanor (1969) used the OPI to assess change in college students. Using multivariate statistical techniques to analyze responses on selected scales of the OPI, the analysis showed that the groups studied were not only significantly different initially and finally, but also in the way they changed. Table 2 identifies and defines the OPI scales predicted to differentiate among the three life stages in the current study as well as general descriptions based on most frequent responses to the scale. Predicted differences in life stage scores are summarized in Table 3. The predicted score on each scale used for each life stage was based on life stage characteristics described in Sheehy (1976).

Table 2

Descriptive Data for OPI Scales used in the Study

Scale Name and Number of Items	Definition	Descriptions Based on Most Frequent Responses	
		High Scorers:	Low Scorers:
Thinking Introversion (TI) - 43 items	Persons scoring high on this measure are characterized by a liking for reflective thought and academic activities. They express interests in a broad range of ideas found in a variety of areas such as literature, art, and philosophy. Their thinking is less dominated by immediate conditions and situations, or by commonly accepted ideas, than that of thinking extroverts (low scorers). Most extroverts show a preference for overt action and tend to evaluate ideas on the basis of their practical, immediate application, or to entirely reject or avoid dealing with ideas and abstractions.	enjoy thought provoking lectures, mull over ideas presented in class, examine and analyze their own motives and reactions, question teachers' statements and ideas, are interested in learning about history of human thought, and enjoy test questions in which information is in a different form than originally learned.	dislike reading serious or philosophical works, reading serious poetry, writing reactions to a philosophical point of view, or spending leisure time writing essays; like short, factual questions in an examination better than those that require organization and interpretation.
Complexity (Co) - 32 items	This measure reflects an experimental and flexible orientation rather than a fixed way of viewing and organizing phenomena. High scorers are tolerant of ambiguities and uncertainties; they are fond of novel situations and ideas. Most persons high on this dimension prefer to deal with complexity, as opposed to simplicity,	like to take a chance on something without knowing whether it will actually work, to play with ideas even if they should turn out to be a waste of time, and to undertake projects about whose outcome they have no idea; the unfinished	do not like things to be uncertain and unpredictable, do not hate regulations, are not politically radical, and have not had peculiar or strange experiences; they prefer pleasant friends to those always involved in some difficult

Table 2 Continued

Scale Name and Number of Items	Definition	Descriptions based on Most Frequent Responses	
		High Scorers:	Low Scorers:
Complexity - continued	and very high scorers are disposed to seek out and to enjoy diversity and ambiguity.	and imperfect holds greater appeal for them than the completed and polished, and they believe that for most questions there is more than one right answer.	problem, and find straightforward reasoning more appealing than the search for analogies and metaphores.
Autonomy (Au) - 43 items	The characteristic measured by this scale is composed of liberal, nonauthoritarian thinking and a need for independence. High scorers show a tendency to be independent of authority as traditionally imposed through social institutions. They oppose infringements on the rights of individuals and are tolerant of viewpoints other than their own; they tend to be realistic, intellectually and politically liberal, and much less judgemental than low scorers.	feel that disobedience to government is sometimes justified, and do not favor strict enforcement of all laws no matter what the consequences; deny that only a fool would change the American way of life, that communism is the most hateful think in the world today, that the most important qualities of a husband are determination and ambition, and that there must be something wrong with a person who lacks religious feelings.	feel that parents generally prove to know best, that young people get rebellious ideas but ought to outgrow them and settle down as they mature, that it is the responsibility of intelligent leaders to maintain the established order of things, and that only a callous person does not feel love and gratitude toward his parents.

Table 2 Continued

Scale Name and Number of Items	Definition	Descriptions based on Most Frequent Responses	
		High Scorers:	Low Scorers:
Religious Orientation (RO) - 26 items	High scorers are skeptical of conventional religious beliefs and practices and tend to reject most of them, especially those that are orothodox or fundamentalistic in nature. Persons scoring around the mean are manifesting a moderate view of religious beliefs and practices; low scorers are manifesting a strong commitment to Judiac-Christian beliefs and tend to be conservative in general and frequently rejecting of other viewpoints. (The direction of scoring on this scale, with religious orientation indicated by low scores, was based chiefly on the correlation between these items and the first four scales, which measure a general intellectual disposition.)*	deny that one must be wary of those who claim not to believe in God, that there is something wrong with a person who lacks religious feeling, that everyone should have complete faith in a supernatural power whose decisions he obeys without question, or that their church or denomination has the only true approach to God.	believe God exists, that He hears prayers, and that what one believes does matter; they prefer being with people who are religious, and in religious matters they never want to be called skeptical or agnostics.
Impulse Expression (IE) - 59 items	This scale assesses a general readiness to express impulses and to seek gratification either in conscious thought or in overt action. High scorers have an active imagination, value sensual reactions and feelings; very high scorers have frequent feelings of rebellion and aggression.	indicate that at times they feel like swearing and at times they feel like smashing things, that they often act on the spur of the moment without stopping to think, and that some of their friends think their ideas are impractical if not a bit wild; do not	did not give teachers much trouble in school, were not sent to the principal for misbehaving, do not hate regulations, have never done any heavy drinking, and would be uncomfortable in anything other than fairly confentional dress.

*Counselors should make certain respondent understands that high score indicates less evidence of trait while low score indicates more of it!

Table 2 Continued

Scale Name and Number of Items	Definition	Descriptions based on Most Frequent Responses	
		High Scorers:	Low Scorers:
Impulse Expression Continued		prefer people who are never profane, and do not subscribe to the statement that they have never done anything dangerous for the thrill of it.	
Personal Integration (PI) - 55 items	The high scorer admits to <u>few</u> attitudes and behaviors that characterize socially alienated or emotionally disturbed persons. Low scorers often intentionally avoid others and experience feelings of hostility and aggression along with feelings of isolation, loneliness, and rejection.	do not often feel as though they had done something wrong or wicked, that no one seems to understand them, that there is a barrier between them and others, or that they are not as happy as others seem to be.	at times feel completely inadequate, have strange and peculiar thoughts, wonder who they really are and what they should really be like, and sometimes have impulses accompanied by such a strong feeling of urgency that they can think of little else.

Table 2 Continued

Scale Name and Number of Items	Definition	Descriptions based on Most Frequent Responses	
		High Scorers:	Low Scorers:
Anxiety Level (AL) - 20 items	High scorers deny that they have feelings or symptoms of anxiety, and do not admit to being nervous or worried. Low scorers describe themselves as tense and high-strung. They may experience some difficulty in adjusting to their social environment, and they tend to have a poor opinion of themselves. (Note the direction of scoring on this scale: a high score indicates low anxiety level, and vice versa.)	deny that they feel they are about to go to pieces, that they are anxious or high-strung almost all the time, or that they find it hard to concentrate; claim they are happy most of the time.	frequently find themselves worrying, have periods of great restlessness, feel difficulties are piling up, are inclined to take things hard, and are more sensitive than most people.

Table 2 Continued

Scale Name and Number of Items	Definition	Descriptions based on Most Frequent Responses	
		High Scorers:	Low Scorers:
Response Bias (RB) - 28 items	This measure, composed chiefly of items seemingly unrelated to the concept, represents an approach to assessing the students test-taking attitude. High scorers are responding in a manner similar to a group of students asked to make a good impression by their responses to the items. Low scorers, on the contrary, may be trying to make a bad impression or are indicating a low state of well-being or feelings of depression.	enjoy thinking about problems which challenge experts, find the idea of doing research appealing, and enjoy solving problems of the type found in geometry, philosophy, or logic; they feel close to people, and do not forget immediately what people say to them.	have sometimes felt difficulties mounting so high they could not overcome them, have had periods of great restlessness, often find themselves listening without hearing, and find it hard to concentrate on a problem for more than an hour or two at a time; they also feel that civil disobedience is sometimes justified.

Table 3

Predicted OPI Scale Scores by Life Stage

		TI	Co	Au	RO	IE	PI	AL	RB
Life Stage 1	High	X	X	X	X	X			
	Avg.								
	Low						X	X	X
Life Stage 2	High						X	X	X-
	Avg.				X-				
	Low	X	X	X		X+			
Life Stage 3	High	X		X-	X-	X-			
	Avg.		X+						
	Low						X	X	X

The norms for the OPI are based on a large sample of entering students at diverse institutions of higher education. Thirty-seven institutions, located in 14 states, were selected in order to effect some appropriate representation of schools in the various categories of higher education. Ideally, the male and female samples would have been proportionally representative of the total number in the respective categories, but this was not possible.

Where supply permitted, the schools employed were selected to represent different types and qualities. Where institutions were selected from a pool of a given category for inclusion in the normative sample, criteria for the decisions were chiefly the major affiliation or control of an institution, and the aptitude level of entering students.

Although there are significant differences between the sexes on two-thirds of the scales, most of the differences are small. There are 3,540 men and 3,743 women in the sample reported for norming (Heist and Yonge, 1958, p.10).

The standardization sample raw score mean and standard deviation for each of the OPI scales used in this study are reported in Table 4.

Table 4

Standardization Sample OPI Scale Raw Scores

	TI	Co	Au	RO	IE	PI	AL	RB
Mean	25.3	15.3	23.4	11.8	25.6	29.9	12.3	13.4
S.D.	7.9	5.5	8.4	6.2	8.9	10.5	4.6	4.4

"The OPI, in its original and revised versions, was one of several psychological instruments used in a number of investigations at the Center for the Study of Higher Education in Berkeley. Forms C and D have also been used in a variety of studies of undergraduate students in numerous colleges and universities and in other studies of students in various medical schools, institutes of science and technology, and institutes of art. In most of these studies the OPI has served three main purposes: (1) to furnish certain creterion scores, as independent variables, for the identification and selection of "types" of students, (2) to provide a basis for differentiating among student "types" and groups and describing the composition of incoming student bodies, and (3) to provide a basis for measuring change over one or more years in a number of non-intellective characteristics."

"From the standpoint of selection of or differentiation among students, individual scales and clusters of scales have been and can be used to serve the following purposes: (1) to assess degrees or levels of intellectual disposition and the particular emphasis in such a disposition, (2) to assess differences in major orientations of students, e.g., degrees of authoritarianism, religious commitment, or altruism, (3) to measure variations in impulsivity and flexibility, (4) to provide cues for type and intensity of emotional disturbance, and (5) to identify persons who exhibit major correlates of creativity (MacKinnon, 1960; Heist, 1968). Distinctions of this kind, among types or categories of students found in entering classes or in large samples, facilitate the understanding of students, student groups, and the concomitant campus cultures. Of greater importance is the discerning assessment of change permitted by the OPI,

since several of the categorizations permit analysis of change for types of students rather than gross mean score analysis for an entire class."

"Since most of the scales were constructed for or included in the OPI because of their actual or assumed relevance to behavior in an academic setting, some of these scales were as important variables by which to assess development and change presumably related to college experiences. Thus, the same scales that permit categorization of students into "types" and subgroups may serve as the means to measure degree of change over time."

"The above research uses were for the most part fundamental to the development of the OPI scales. The possible utility of various scales in predictive research especially where the predicted criterion is grade point average or grades, has not been pursued by the authors" (Heist and Yonge, 1968, pp. 26-7).

As reported in the OPI manual, "...the coefficients derived by the Kuder-Richardson Formula 21 (KR21) and the corrected split-half method are estimates of the internal consistency of the OPI measures, whereas the test-retest values reflect the tendency of individuals to maintain their relative positions when tested a second time. The KR21 figures, ranging from .67 to .89, were computed for the total standardization sample and are probably slightly higher than would be obtained on less heterogeneous samples."

"Test-retest values are presented...for two different groups. The time intervals between the two test administrations range between three and four weeks for all students. The coefficients in the first instance are based on a sample of 67 women attending three different institutions. Although these test-retest values are all relatively high, the mean scores

of this sample indicate that it is not representative of the standardization group. The mean scores for the group of 71 upperclassmen correspond more closely to the normative sample means on the different scales. In both cases, the great majority of the test-retest reliability coefficients are above .85, with approximately half falling at .89 or above" (Heist and Yonge, 1968, p. 49).

Scoring procedures and statistical analyses of OPI responses are discussed at length in the Data Analysis section. A copy of the OPI, Form F, Answer Sheet appears in Appendix F.

The structured Survey Questionnaire (SSQ) consists of nine closed, or structured, resp-nse questions. The SSQ format design was based on Warwick and Lininger (1975, ch. 6). The question content was derived from Gruen's (1964, p.8) study.

The SSQ contains questions covering the topics of attitudes about: enrollment in college, job/career, social status, plans for the future, leisure time, health, present age, parents, marriage, friendship patterns, and comparison of the present age with other ages. A copy of the SSQ appears in Appendix G. The ADI, SSQ, and demographic data forms were read through for clarity by a random sample of both students and faculty prior to use in this study. Students who read through the forms for clarity prior to study were not allowed to participate in the study.

Respondents were assigned to either LS1, LS2, or LS3 by independent judges based on the respondents' answers on the SSQ. Rules for selecting and training the judges appear in Appendix H, and instructions to the judges, including examples, appear in Appendix I.

Specific scoring procedures and statistical analyses of SSQ responses are discussed at length in the Data Analysis section.

Procedure

Respondents were scheduled in advance to come to a separate testing place. At scheduled times, on scheduled dates, the testing procedures described herein were conducted.

One-half of the test groups were randomly assigned to complete the ADI and the OPI. The other half of the groups were assigned to complete the ADI and the SSQ. Although it was anticipated that the groups assigned to complete the ADI and the SSQ would not require as much time as the groups assigned to complete the ADI and the OPI, both sets of groups were initially scheduled for the same amount of time. Since all materials were untimed, respondents in all groups were told they were free to leave upon completion of the forms.

All materials used by the respondents were administered by the researcher. Materials were arranged in individual file folders. The folders for one-half of the groups included a Statement of Informed Consent, a copy of the ADI, a form requesting the demographic data listed in the Materials section and a copy of the SSQ. Folders for the other half of the groups included a Statement of Informed Consent, a copy of the ADI, a form requesting specific demographic data, a copy of the OPI, Form F, and a copy of the OPI answer sheet.

Materials for each folder were numerically coded to assure correct match-up of responses, serve as a source of data retrieval for uninterpretable/illegible data, and/or a method for finding an individual's OPI results upon their request. Instructions to respondents appear in

Appendices C and D. A separate set of instructions was prepared for the two sets of groups.

Data Analysis

The data to be analyzed consists of the following:

1. Adult Developmental Items which have been marked true or false by each respondent,
2. Omnibus Personality Inventory, Form F, items which have been marked true or false by half of the respondents,
3. Structured Survey Questionnaire responses which have been written by the other half of the respondents, and
4. demographic data for each respondent consisting of sex, chronological age, educational classification, employment information, current and past marital status, information regarding children, and cultural background.

The data analysis section includes a discussion of the procedures for scoring the ADI and SSQ as well as the procedures used to obtain measures of reliability on these instruments. After establishing the measures of reliability for the ADI and the SSQ the task was to determine the relationship, if any, between the results of the two instruments and do an item discrimination analysis using the results from both instruments to compile a "final, best set" of items that could be used to construct a scale to discriminate between people in LS2 and people not in LS2. The discussion of the procedures just outlined follows.

If ADI true responses are scored as one and false responses are scored as zero, then a score may be calculated for each respondent for each life stage: an LS1 score, an LS2 score, and an LS3 score.

The responses to items within each life stage were used to calculate the split-half reliability measure. Split half was deemed a satisfactory reliability measure since there was no speed component in the administration of the items and a retest would have been difficult to arrange (Helmstadter, 1964, p.80).

In summary, research respondents were randomly assigned to two groups. One group of respondents completed a statement of informed consent, the ADI, a demographic data sheet, and the SSQ. The other group completed a statement of informed consent, the ADI, a demographic data sheet, and the OPI.

The ADI was constructed so that an answer of true to any item indicated that the respondent was exhibiting a characteristic of the LS represented by that item. Respondents were not aware which items were representative of which life stages since the items for the 3 life stages were randomly mixed. Respondents were given a score of +1 for each true response and a score of 0 for each false response. Three LS scores were then computed for each respondent, an LS1, an LS2, and an LS3 score. The score for each LS was calculated by summing the total number of true responses to items in each of the three life stages.

A visual inspection of the SSQ data revealed that only respondents placed in LS1 and LS2 by the judges could be included in the analysis. LS3 respondents had to be omitted due to an insufficient number (n=3). A t-test was performed on the mean ADI LS2 scores of the SSQ group as originally calculated. The results of this test indicated that the null hypothesis that the mean LS2 score of LS1 respondents was higher than the mean LS2 score of LS2 respondents could not be rejected.

A regression analysis was then performed to determine the portion of the originally calculated ADI LS2 score for respondents of this group that could be explained in terms of total positive response frequency (i.e., the proportion of total positive responses which were marked across all three life stages). Next, an item discrimination analysis was performed using a point biserial correlation procedure. In this procedure the residual (the portion of the originally calculated ADI LS2 score that was not explained in terms of total positive response frequency) was used as the continuous variable and the response to each item (either true or false) as the dichotomous variable. Items retained from this analysis were used to construct the final ADI LS2 scale.

Using the items retained from the item analysis, a new LS2 score was obtained for each of the SSQ respondents. An item was given a score of +1 if its correlation coefficient was positive and the respondent marked it true. An item was also given a score of +1 if its correlation coefficient was negative and the respondent marked it false. In all other cases an item was given a score of zero. The sum of the item scores was the respondent's new LS2 score. A t-test was performed on the resulting mean LS2 scores for the LS1 and LS2 groups to determine if (1) the scores were significantly different and (2) they differed in the expected direction. Misclassifications by this method were analyzed using demographic data.

The division of respondents into groups was based on pre-defined criteria. In one case, groups were formed on the basis of ADI LS2 scores calculated using items retained from the item discrimination analysis. In the other case, the groups were formed on the basis of LS as assigned by the ghree judges. Therefore, the significance of the t-test would

demonstrate empirical validity (Helmstadter, 1964, p.113). However, the reader is cautioned to remember that empirical validity would be shown only if items which comprised the final set discriminated according to the hypothesis (i.e., positive correlations for LS2 items and negative correlations for LS1 and LS3 items). Since all materials were administered only once to respondents only concurrent validity could have been demonstrated (Helmstadter, 1964, pp.129-130).

The final ADI LS2 scale was then used to compute an ADI LS2 score for the OPI group. A description of each scale of interest was given in the Materials section. Also, an indication of whether it was expected that an LS2 respondent would score high, average, or low on each scale was given.

The Omnibus Personality Inventory Manual (Heist & Yonge, 1968, p.4) states, "The point at which any score may be defined as a high score is relative. The only common basis one can use across schools and sections of the country is the normative table. On most scales standard scores of 60 (84th . percentile) or above are interpreted as sufficiently high for the essence of the respective definition to apply...".

Since this research is exploratory in nature, a slightly more liberal definition of high score will be used. A high score was defined to be a standardized score of 56.75 or higher (75th. percentile). A low score was defined as a score of 43.25 or lower (25th. percentile). A score between 43.25 and 56.75 was called average.

A Pearson product-moment correlation was computed between the ADI LS2 score and each of the scale scores for respondents to determine the relationship between OPI scale scores and ADI LS2 scores. This was done to

determine if the predicted scoring patterns did, in fact occur. In addition, a t-test was performed comparing the mean ADI LS2 scores of the high-scoring and low-scoring groups for each OPI scale. This analysis was important because if it was successful, a type of cross-validation using construct validity (Helmstadter, 1964, p.139) would be demonstrated.

RESULTS

Inter-judge and ADI Reliabilities

In the Methods section Table 1 reported the proposed distribution of respondents for this analysis. The actual distribution of respondents is reported in Table 5. This distribution differed somewhat from the proposed distribution. This fact added another limitation to the generalizability of the results.

Interpretation, evaluation, and discussion of the results of any study in a meaningful way require knowledge of the reliability of the instruments used. The ADI was constructed so that a split-half reliability coefficient could be computed using the Spearman-Brown formula. It would have been possible to do a single split-half reliability using the "first half" 36 items (12 items from each LS) and the "second half" 36 items (the matching 12 items from each LS). However, the reliability coefficient was unacceptable, it would then be necessary to determine which set(s) of items, LS1, LS2, or LS3, were not reliable. This being the case, a split-half reliability with the Spearman-Brown correction was computed for each LS. The split-half reliability was computed using ADI responses of both the SSQ and the OPI groups. The reliability coefficient for each LS is reported in Table 6.

Table 5

Actual Distribution of Research Respondents
by Age Within Life Stage Groups

	age group	female married	male married	female single	male single	total
Life Stage 1	18-19	0	1	2	1	4
	20-21	1	1	7	7	16
Life Stage 2	22-23	4	1	10	2	17
	24-26	4	2	4	2	12
	27-28	9	3	3	0	15
Life Stage 3	29-30	4	11	2	2	19
	31-32	6	6	3	1	16
	Total	28	25	31	15	99

Table 6

Reliability for LS1, LS2, and LS3 ADI
Using Both SSQ and OPI Groups

Life stage	n	reliability coefficient
1	92	.76*
2	85	.70*
3	91	.82*

Note: n differs for each LS due to missing data

*p<.001

Reliability of the SSQ depended on the degree of agreement among the three judges' ratings. However, since the judges' ratings were actually categorical (i.e., placing respondents into groups rather than assigning them scores), and it was not possible to say that the value of any one group was greater or less than any other, a procedure for obtaining inter-judge reliability using nominal data was required. Only a signle reference for such a procedure was found. This procedure, however, involved "m" judges rating a single individual on "n" different characteristics and thereby obtaining some measure of agreement about these characteristics for each individual. This resulted in a "score" or measure for each individual respondent. It was determined that such a procedure was not appropriate for the present analysis.

Ultimately, two independent procedures for the use of nominal data were performed. The first procedure was the comparison of actual, observed frequencies of agreement among the three judges with computed statistical probability. These results are reported in Table 7. This procedure compared the number of actual agreements and disagreements among judges to the number of agreements and disagreements that would be expected to occur by chance alone. Agreement was defined as occurring when either two of the three judges or all three judges agreed on placement of a respondent in an LS.

Table 7

Observed and Expected Frequencies of Agreement
Among Three Independent Judges

agree	expected f	observed f
unanimously agree	5.4	13.0
two of three or all three judges agree	38.1	46.0
totally disagree	10.9	3.0

n = 49

A Chi-square test for goodness of fit was calculated to determine if the observed frequencies differed significantly from what might be expected by chance alone. The results of this test yielded a chi-square value of 7.35. With one degree of freedom this value is significant at the .01 leval. Table 8 shows the chi-square procedure used.

Table 8

Chi-square Goodness of Fit for Agreement Among Three Judges

	observed	expected
agreement	46	38.1
disagreement	3	10.9

$X^2 = 7.349$, 1df

$p<.01$

The second procedure which was used to estimate the degree of inter-judge reliability was the Monte Carlo simulation (Giffin, 1971, p.598). This procedure was used to analyze the results of 1,000 sets of 49 subjects where LS assignments have been made at random. The procedure provided the expected frequency with which two or three judges would agree (out of 49) if placement in an LS by each judge was at random. Table 9 shows the frequency, cumulative frequency, percent, and cumulative percent for the number of times out of 49 two or three judges would be expected to agree if LS assignment had been made at random. The observed frequency of agreement among the judges was 46 times. The Monte Carlo simulation distribution indicates that an observed frequency of 46 or more (out of 49) would occur by chance alone only four times in 1,000.

OPI Reliability

The Kuder-Richardson Formula 21 reliability of the OPI was reported by Heist and Yonge (1968, p.49) as ranging from .67 to .89 for the total standardization sample. Test-retest reliability values for two different groups were above .85 for the majority of scales with approximately half falling at .89 or above (Heist & Yonge, 1968, p.49).

ADI Analysis for SSQ Group

The next task was to develop an LS2 scale. It was initially determined that items used to construct this scale would be the ones that discriminated among life stages at the .10 level of significance.

Table 9

Monte Carlo Simulation of 1000 Sets of 49 Subjects

No. of times 2 or 3 judges agree (out of 49)	Count	frequency	cumulative f	%	cumulative %
49	0	0.000	.000	0	0
48	1	.001	.001	.1	.1
47	0	.000	.001	0	.1
46 (observed)	3	.003	.004	.3	.4
45	5	.005	.009	.5	.9
44	11	.011	.020	1.1	2.0
43	32	.032	.052	3.2	5.2
42	53	.053	.105	5.3	10.5
41	102	.102	.207	10.2	20.7
40	113	.113	.320	11.3	32.0
39	123	.123	.445	12.3	44.3
38	146	.146	.589	14.6	58.9
37	138	.138	.727	13.8	72.7
36	85	.085	.812	8.5	89.2
35	89	.089	.901	8.9	90.1
34	47	.047	.948	4.7	94.8
33	23	.023	.971	2.3	97.1
32	16	.016	.987	1.6	98.7
31	8	.008	.996	.8	99.5
30	3	.003	.998	.3	99.8
29	1	.001	.999	.1	99.9
28	0	.000	.999	0	99.9
27	1	.001	1.000	.1	100.0

Table 10

Descriptive Data for SSQ Respondents in Descending Order by ADI LS2 Score

Observation	Total Response	Resp. rate	Observed ADI LS Score	LS assigned by judges
1	53	.38	20	2
2	53	.36	19	2
3	46	.41	19	2
4	40	.48	19	2
5	53	.34	18	2
6	43	.42	18	2
7	48	.38	18	1
8	51	.35	18	2
9	38	.45	17	2
10	57	.30	17	2
11	53	.32	17	2
12	58	.29	17	2
13	44	.36	16	2
14	54	.30	16	2
15	49	.33	16	2
16	52	.31	16	1
17	58	.26	15	1
18	46	.33	15	1
19	53	.28	15	1
20	45	.33	15	2
21	47	.32	15	1
22	45	.33	15	1

Table 10 Continued

Observation	Total Response	Resp. Rate	Observed ADI LS Score	LS assigned by judges
23	55	.25	14	2
24	44	.32	14	2
25	50	.28	14	1
26	48	.29	14	3
27	49	.29	14	2
28	42	.31	13	2
29	42	.31	13	2
30	42	.31	13	2
31	33	.39	13	2
32	42	.31	13	2
33	39	.33	13	2
34	48	.25	12	1
35	48	.25	12	1
36	44	.27	12	2
37	54	.22	12	2
38	36	.31	11	1
39	33	.33	11	2
40	31	.35	11	2

Determination of which of the original 72 items to be retained required first that comparison groups be formed by some criterion so LS scores could be compared. It was determined that the LS1, LS2, and LS3 groups would be formed using the judges' ratings of respondents in the SSQ group. Three of the 49 respondents in this group had to be eliminated initially since none of the three judges agreed on an LS placement for them. The remaining 46 respondents were distributed as follows: LS1 n = 12, LS2 n = 31, and LS3 n = 3. Only LS1 and LS2 respondents were included in the following analysis. Due to the insufficient n for LS3, this LS was omitted from this analysis. A t-test was then completed using the originally calculated LS2 scores for LS1 and LS2 group respondents as the dependent variable. The purpose of this test was to determine whether or not the mean LS2 scores for the two groups differed significantly. Computation of the t value did not include respondents for whom either an originally calculated LS2 score or an LS assignment by judges was missing. ADI and SSQ data for SSQ respondents are described in Table 10. The result of the t-test shown in Table 11, indicated no significant difference between the two groups ($p>.10$).

Table 11

Difference Between Original ADI LS2 Scores of Groups Assigned to Life Stages by Judges

	life stage assigned by judges		
	1	2	3
n	11	28	1
M	14.4	15.3	14
SD	2.01	2.68	0

t = 1.03, 37 df

not significant, p>.10

The result of finding no significant difference between mean LS2 scores for the two groups generated further visual inspection of the data reported in Table 10. This inspection resulted in the determination that a high LS2 score appeared to be associated with a high total positive response across all three LS scores, and a low LS2 score appeared to be associated with a low total positive response across all three LS scores. Total positive response frequency was defined as the proportion of items marked true by a respondent across all three life stages. Visual inspection of the data did not reveal any other evident information relating to LS2 scores as originally calculated.

Since this finding created the need to account for the effect of total positive response frequency, it was determined that a regression analysis (Roscoe, 1975, p.126) would be run to accomplish that purpose. The amount of the originally calculated LS2 score that could be explained in terms of the total positive response frequency would be provided from the regression analysis.

A comparison of the regression analysis data with the originally calculated ADI LS2 score appears in Table 12. The data appear in descending order by residual value. A t-test was used to determine if there was a significant difference in mean residual values for the two groups. The mean residual was found to differ at the .05 level of significance. Data for the t-test are described in Table 13.

Table 12

Comparison of Regression Analysis Data with Original ADI LS2 Score for SSQ Respondents

Observation	Total Response	Observed ADI LS2 Score	Expected ADI LS2 Score	Residual	LS assigned by judge
1	40	19	13.5	5.5	2
2	46	19	14.7	4.3	2
3	43	18	14.1	3.9	2
4	38	17	13.1	3.9	2
5	53	20	16.2	3.8	2
6	48	18	15.1	2.9	1
7	53	19	16.2	2.8	2
8	51	18	15.8	2.2	2
9	53	18	16.2	1.8	2
10	44	16	14.3	1.7	2
11	33	13	12.1	0.9	2
12	53	17	16.2	0.8	2
13	49	16	15.4	0.6	2
14	45	15	14.5	0.5	2
15	45	15	14.5	0.5	1
16	46	15	14.7	0.3	1
17	58	17	17.2	0.2	2
18	47	15	14.9	0.1	1
19	57	17	17.0	0.0	2
20	52	16	16.0	0.0	1
21	44	14	14.3	-0.3	2

Table 12 Continued

Observation	Total Response	Observed ADI LS2 Score	Expected ADI LS2 Score	Residual	LS assigned by judges
22	39	13	13.3	-0.3	2
23	54	16	16.4	-0.4	2
24	31	11	11.7	-0.7	2
25	42	13	13.9	-0.9	2
26	42	13	13.9	-0.9	2
27	42	13	13.9	-0.9	2
28	42	13	13.9	-0.9	2
29	33	11	12.1	-1.1	2
30	48	14	15.1	-1.1	3
31	53	15	16.2	-1.2	1
32	49	14	15.4	-1.4	2
33	50	14	15.6	-1.6	1
34	36	11	12.7	-1.7	1
35	58	15	17.2	-2.2	1
36	44	12	14.3	-2.3	2
37	55	14	16.6	-2.6	2
38	48	12	15.1	-3.1	1
39	48	12	15.1	-3.1	1
40	54	12	16.4	-4.4	2

Table 13

Difference Between Mean Residual Values of Groups Assigned to Life Stages by Judges

	Life Stages Assigned by Judges		
	1	2	3
n	11	28	1
M	-0.839	0.553	
S.D.	1.787	2.312	

t = 1.79*, 37 df

* p<.05

The finding that there was a significant difference in mean residual values for the two groups (LS1 and LS2 as assigned by the judges) provided the basis for an item analysis to determine which of the original 72 items discriminated at a significant level. The item discrimination analysis was carried out using a point biserial correlation procedure. The continuous variable for this procedure was the residual and the dichotomous variable was the response to each item. Items retained from this item analysis were those with either a large positive correlation coefficient or a large negative correlation coefficient. A large positive correlation coefficient indicated that being in LS2 was related to a large number of true responses to an LS2 item, and not being in LS2 was related to a small number of true responses to an LS2 item. A large negative correlation coefficient indicated that being in LS2 was related to a small number of true responses to LS1 and LS3 items, and not being in LS2 was related to a large number of true responses to LS1 and LS3 items. A one-tailed test was required to see if the correlation coefficient for each item differed in the expected direction. Since this was exploratory in nature, an original alpha level of .10 was used (Roscoe, 1975, p. 182). Items with a correlation coefficient significant at the .05 level were retained. A more rigorous alpha level than the .10 initially proposed was deemed appropriate since it provided 22 items distributed as follows: LS2 items n = 10 and LS1 and LS3 items n = 12. Eleven of the 22 items were retained from each half of the original scale. These items were then used to construct a "final" LS2 scale. The final LS2 scale, along with the correctly keyed response for each item, appears in Appendix K.

A new ADI LS2 score was calculated for each SSQ respondent using this scale to rescore the ADI forms. The new ADI LS2 scores are reported in Table 14. Again, respondents were placed in groups using the judges' ratings. The mean LS2 score was calculated for each group. A t-test was used to determine whether or not the new mean LS2 scores of the two groups were significantly different. The t-test yielded results that the mean difference was significant at the .05 level. These results are reported in Table 15.

Visual inspection of the data in Table 14 revealed that some misclassifications had occurred. A misclassification was defined as either a respondent with a "high" ADI LS2 score who was not placed in LS2 by the judges or a respondent with a "low" LS2 score who had been placed in LS2 by the judges. For purposes of this analysis a high ADI LS2 score was defined as any score equal to or greater than the upper limit fo the 90% confidence interval about the LS2 mean, and a low ADI LS2 score was defined as any score equal to or less than the lower limit of the 90% confidence interval. The 90% confidence interval was 10.18 ± 1.28, or 8.9 to 11.5.

Table 14

SSQ Respondents in Descending Order
by New Life Stage 2 Score

Observation	Old ADI LS2 Score	Residual	New ADI LS2 Score	LS assigned by judges
1	19	5.5	19	2
2	17	3.9	18	2
3	19	4.3	16	2
4	18	2.9	15	1
5	18	3.9	14	2
6	16	1.7	14	2
7	18	1.8	13	2
8	18	2.2	13	2
9	20	3.8	13	2
10	13	-0.9	12	2
11	13	-0.3	11	2
12	15	0.3	11	1
13	13	-0.9	11	2
14	19	2.8	11	2
15	13	0.9	10	2
16	17	0.0	10	2
17	11	-1.1	10	2
18	17	0.8	9	2
19	16	0.0	9	1
20	13	-0.9	9	2
21	14	-1.1	9	3

Table 14 Continued

Observation	Old ADI LS2 Score	Residual	New ADI LS2 Score	LS assigned by judges
22	16	0.6	8	2
23	14	-1.6	8	1
24	11	-0.7	8	2
25	14	-0.3	8	2
26	15	0.5	8	2
27	15	0.1	7	1
28	15	0.5	7	1
29	13	-0.9	7	2
30	11	-1.7	7	1
31	17	0.2	7	2
32	16	-0.4	7	2
33	15	-1.2	6	1
34	14	-1.4	6	2
35	14	-2.6	5	2
36	12	-2.3	5	2
37	12	-3.1	4	1
38	12	-3.1	4	1
39	15	-2.2	4	1
40	12	-4.4	2	2

Table 15

Difference Between New ADI LS2 Scores of Groups Assigned to Life Stages by Judges

	Life Stage Assigned by Judges	
	1	2
n	11	28
M	7.455	10.179
S.D.	3.328	3.982

$t = 2.01$

$p < .05$

Using this criterion, any respondent who scored 8.9 or lower and was placed in LS2 by the judges was classified as a "false positive" (Helmstadter, 1964, p.120). Conversely, any respondent who schores 11.5 or higher but was not placed in LS2 by the judges was classified as a "miss" (Helmstadter, 1964, p.120). A total of 12 misclassifications resulted from rescoring the ADIs of the SSQ group. The misclassifications included one "miss" and 11 "false positives".

The most obviously discernible patterns would create the following general description for the female "false positive" respondents" age 25.5 years, Master's level graduate student carrying approximately 8 credit hours, working approximately 20 hours per week, from urban background, and has no children. For male "false positive" respondents, since n = 2, it is not possible to complete such a broad general description. However, the discernible patterns would create the following description: age 30, carrying approximately 6 credit hours, working approximately 20 hours per week, and from urban background. In general, the female "false positive" respondents did not identify themselves as belonging to a particular cultural or ethnic group (n = 8). One of the two males did. Only two of the 11 "false positive" respondents had children. One female had one child and one male had two children. No other overall patterns were found to exist. The "miss" was a 21 year old male, single never married, college senior, from urban background who did not identify himself as belonging to a particular ethnic or cultural group.

OPI Analysis

For each respondent in the OPI group an ADI LS2 score was calculated using the final set of items. Also, a raw score and a standard score were

computed for each of the eight OPI scales used. The means and standard deviations of the research sample OPI scale raw scores are reported in Table 16. Visual inspection and comparison with the data from the OPI standardization sample, Table 4, reveals that the groups appear to be generally comparable. The raw scores were converted to standard scores using the chart provided by the publishers. Using the criterion of the 75th percentile, a high standard score was any score equal to or greater than 57. A low standard score was defined, using the criterion of the 25th percentile, as a score of 43 or less. Two groups of OPI respondents were formed for each of the scales, a high-scoring group and a low-scoring group. The high-scoring group for each scale included those respondents who scored 57 or higher on that scale. The low-scoring group for each scale included those respondents who scored 43 or lower on that scale. A Pearson product-moment correlation coefficient was computed between the ADI LS2 score and the score of each OPI scale.

Table 16

Research Sample OPI Scale Raw Scores

	TI	Co	Au	RO	IE	PI	AL	RB
M	23.3	15.4	27.7	11.6	28.1	34.6	13.2	13.0
SD	7.6	5.9	6.2	4.6	9.9	10.2	4.3	3.9

The results of the correlation procedure, including a comparison with expected results as reported in Table 3, appear in Table 17. Table 18 describes the high-scoring and low-scoring groups for each of the eight OPI scales used in this study.

A t-test was performed on the mean ADI LS2 scores of the high-scoring and low-scoring groups for each of the OPI scales used to determine whether these groups differed significantly and in the predicted direction. Data from the t-tests also appear in Table 18.

A Pearson product-moment correlation was computed using scores of all respondents on the set of ADI items retained to construct the final ADI LS2 scale. Referring to Table 19 the correlation coefficients indicate that there may be some similarities between LS1 and LS3, but few if any similarities between LS1 and new LS2 or new LS2 and LS3.

Demographic Data Analysis

The demographic data for research respondents are reported to aid in answering the research questions concerning the exploratory analysis.

Table 17

Correlation Between ADI LS2 Score and OPI Scale Scores for OPI Respondents

OPI Scale	r	Expectation From Table
TI	-.403***	Low
Co	-.303**	Low
Au	-.454***	Low
RO	-.060	Avg.-
IE	-.286**	Low+
PI	.225*	High
AL	.116	High
RB	.128	High-

Note: n=47 for all cases

* p<.10

** p<.05

*** p<.01

Table 18

Descriptive Data and t Values for High-Scoring and Low-Scoring Respondents by OPI Scale

OPI Scale	n	Mean LS2 Score	S.D.	t	df	Expectation from Table 3
TI				1.475*	23	Low
High	6	7.5	2.5			
Low	19	9.7	3.4			
Co				-2.021**	29	Low
High	15	7.1	3.0			
Low	16	9.4	3.5			
Au				1.661*	25	Low
High	23	7.4	3.3			
Low	4	10.3	2.1			
RO				0.604	12	Avg.-
High	7	9.1	3.4			
Low	7	10.3	3.7			
IE				2.487**	30	Low+
High	20	8.2	3.2			
Low	12	11.0	2.9			
PI				1.430*	27	High
High	24	9.2	3.6			
Low	5	6.8	1.8			

Table 18 Continued

OPI Scale	n	Mean LS2 Score	S.D.	t	df	Expectation from Table 3
AL				0.792	25	High
High	17	9.1	4.0			
Low	10	8.0	2.6			
RB				1.401*	22	High-
High	11	10.1	4.1			
Low	13	8.2	2.7			

* p<.10

** p<.01

Table 19

Correlation Between LS1, New LS2, and LS3

Life Stages	r	n
LS1 - New LS2	-0.5667*	91
LS1-LS3	0.4569*	89
New LS2 - LS3	-0.3968*	91

* $p<.001$

Table 20 describes demographic data and LS assigned by the judges for SSQ respondents. Except for the possible distortion created by the solitary outlier in both LS1 and LS3 the data appeared to indicate that research respondents' Mean age was within the range described by Sheehy (1976) for each of the three life stages. Inspection of the respondents in LS2 revealed that almost half the respondents (n = 15) were age 30 or older. Table 21 describes demographic data for SSQ, OPI, and total sample LS2 respondents defined by a new ADI LS2 score of 10 or higher. Total sample statistics appeared to indicate there was relatively little age difference between single males and single females or between married males and married females. However, there appears to be considerable age difference between single respondents and married respondents (approximately 6 - 6.5 years). Table 22 describes the frequency distribution of the sample by age and sex for married respondents in both the SSQ and the OPI groups. The data appeared to indicate that no age difference existed between married males and married females. Table 23 reports the new LS2 scores of married respondents with and without children by SSQ group, OPI group, and total sample. It appeared from the data that, in general, married respondents with children had higher LS2 scores than married respondents without children.

Table 20

Demographic Data and LS Assigned by Judges for SSQ Respondents

LS1				LS2				LS3			
Male		Female		Male		Female		Male		Female	
S	M	S	M	S	M	S	M	S	M	S	M
21		18		21	22	20	32		29	21	
20		20		30	30	30	21			31	
21		20			32	22	28				
23		21			31	30	30				
20		19			30	22	23				
23		31			31	23	22				
					30		27				
					30		30				
					32		26				
					24		22				
					26		24				
							32				
n	6	0	6	0	2	11	6	12	0	1	2	0
M	21.3	0	21.5	0	25.5	28.9	24.5	26.4	0	29	26	0
S.D. =	1.37	0	4.76	0	6.36	3.36	4.37	4.01	0	0	7.07	0

	Total
n =	12
M =	21.4
S.D. =	3.34

n =	13
M =	28.4
S.D. =	3.80

n =	18
M =	25.8
S.D. =	4.11

n =	3
M =	27.0
S.D. =	5.29

Table 20 Continued

Without Outliers

	LS1	LS2	LS3
h =	11	31	2
M =	20.5	26.9	30.0
S.D. =	1.51	4.13	1.41

Table 21

Demographic Data for Respondents by Group and Total Sample

Group	Male		Female	
SSQ	Single	Married	Single	Married
	21	22	20	28
	21	30	23	21
	21	31		32
		32		30
		24		22
		30		26
		32		
n =	3	7	2	6
M =	21	28.7	21.5	26.5
S.D. =	0	4.03	2.12	4.37
OPI		30	20	24
		29		27
		27		32
		19		29
		29		28
		27		27
		30		
		21		
n =	0	8	1	6
M =	0	26.5	20	27.8
S.D. =	0	4.21	0	2.64

Table 21 Continued

Total Sample				
	Single	Married	Single	Married
n =	3	15	3	12
M =	21.0	27.5	21.0	27.2
S.D. =	0	4.14	1.73	3.51

Table 22

Frequency Distribution of Married Respondents by Age and Sex for OPI and SSQ Groups

	Males		Females	
Age	SSQ	OPI	SSQ	OPI
18		1		
19				
20				
21		1	1	
22	1		3	1
23				
24	1		1	1
25				
26	1		1	1
27		2	1	4
28		1	1	3
29	1	3		1
30	4	3	2	1
31	2	1	1	2
32	3		2	1
n =	13	12	13	15
M =	29.2	27.5	26.7	27.8
S.D. =	3.18	3.73	4.13	2.65

Total	Males	Females
n =	26	27
M =	28.0	27.7

Table 23

New LS2 Scores for Married Respondents With and Without Children by SSQ Group, OPI Group, and Total Sample

SSQ Group	Males		Females	
Observation	With	Without	With	Without
1	16	11	14	18
2	19	7	12	14
3	13	11	8	7
4	10	9	9	8
5	9	8		8
6	8	11		7
7	9			10
8				11
9				8
n =	7	6	4	9
M =	12.00	9.50	10.75	10.11
S.D. =	4.16	1.76	2.75	3.72
OPI Group				
1	14	7	8	8
2	12	12	13	11
3	10	13	9	4
4	13	10	15	6
5	14	8	12	8
6		12	14	5
7			6	9
8				9
n =	5	6	7	8
M =	12.60	10.33	11.0	7.5
S.D. =	1.67	2.42	3.37	3.51

Table 23 Continued

Total Sample	Males		Females	
	With	Without	With	Without
n =	12	12	11	17
M =	12.25	9.9	10.9	8.9
S.D. =	3.25	2.07	3.02	3.33

Table 24 describes the sample distribution of married respondents with and without children. The mean age of all respondents, both males and females, with children appeared to be older than the mean age of all respondents without children.

Visual inspection of these tables reveals that the sample was distrubuted unevenly enough in most respects to possibly have affected the results by age bias in the direction of the older respondents as well as marital status bias in the direction of married respondents. These probable biases were interpreted as deterrents in drawing conclusions about the sample using demographic data. However, some general patterns with respect to this particular sample will be discussed.

Discussion

The stated major intent of this study was to develop a scale that would discriminate among people who were and were not in a specific life stage, LS2. Since the actual number of respondents (n = 99) was considerably less than originally proposed (n = 160) in most instances the analyses of demographic data were performed on SSQ respondents as one group and OPI respondents as another group in addition to being performed on all respondents as a total group. Of course, the analyses required in connection with the two research hypotheses were performed on the separate groups as originally proposed.

Table 24

Distribution of Married Respondents With and Without Children

Age	Male		Female	
	With	Without	With	Without
18				
19		1		
20				
21	1			1
22		1		2
23				2
24		1	1	1
25				
26		1		2
27	1	1	1	4
28	1		2	2
29	1	3	1	
30	5	2	1	2
31	2	1	2	1
32	2	1	3	
n =	13	12	11	17
M =	29.3	27.3	29.5	26.0
S.D. =	2.87	3.92	2.54	3.04

Research Hypotheses

Before the results of any research study can be discussed meaningfully, some measure of reliability of the instruments must be demonstrated. Split-half reliability figures for the ADI were obtained for each LS using both the SSQ and the OPI groups. These figures were .76, .70, and .82 for LS1, LS2, and LS3 respectively. The statistical significance ($p<.001$) of these figures gives support to the notion that the ADI possesses some measure of reliability. This being true, it was expected that the mean LS2 scores would be significantly different for respondents in and not in LS2. This did not prove to be the case ($t = .966$, 37df). This finding created some concern since the comparison groups had been formed using life stages assigned by three judges. Agreement among judges was defined as either two of three or all three judges assigning the respondent to the same LS. If none of the judges agreed with each other, the LS value was treated as mising data. Agreement among the judges appeared to happen significantly more frequently than would be expected by chance alone (X^2 $p<.01$; Monte Carlo simulation indicated four chances in 1,000 for this level of agreement). Since both the ADI and the judges ratings of the SSQ appeared to show some measure of reliability, the finding that the mean LS2 scores of the two groups were not significantly different presented a puzzle.

A visual inspection of the data revealed that the frequency of total positive response, that is the proportion of an individual's total responses across all three life stages that were answered true, appeared to have an effect on LS scores. That is to say that, for example, the only apparent difference between people placed in LS2 by the judges who had high ADI LS2 scores and people placed in LS2 by the judges who had low LS2 scores

was that the total positive response of the former was greater than that of the latter. It is possible that such a result was partially due to a lack of experience in scale construction on the part of the researcher.

Since no control for total positive response frequency had been built into the scale, some method was required for determining this information after the fact. A regression analysis was used to determine the amount of the originally calculated ADI LS2 score that could be explained in terms of total positive response frequency. It was thought that the residual would then possibly be the amount of the original LS2 that might be explained in terms of demographic variables and their interactions and LS2 factors. A commonly accepted explanation is that the residual is is simply error (Roscoe, 1975, p. 123). This explanation is based on a demonstration of the size of the residual as a function of error. In other words, the more the observed score differs from the expected score the greater the opportunity for error. However, since it has not yet been determined what effect can be explained in terms of measured demographic variables in this study, an alternative hypotheses is that the residual can be explained, at least partially, in terms of demographic variables, interactions among demographic data, and LS factors.

Proceeding on the basis that the residual may be at least partially explained as the portion of the original LS score accounted for by demographic variables, interactions among demographic variables, and LS factors, a t-test of the mean residuals for respondents placed in LS1 by the judges and respondents placed in LS2 by the judges was performed. The means appeared to be significantly different at the .05 level. At

this point two groups formed by one procedure (placement in a LS by judges) appeared to differ significantly on a single variable obtained by another measure, the residual of the original ADI scale.

In an effort to determine which of the original items discriminated between the LS1 as assigned by judges and LS2 as assigned by judges groups a point biserial correlation procedure was performed. This item discrimination analysis provided the final 22 item LS2 scale which appears in Appendix K. Items retained for this scale discriminated between the two groups at the .05 level of significance. These items were used to rescore the ADIs of the SSQ respondents. Comparison groups for this process were formed using LS assigned by judges. The mean LS2 score for the two groups differed at the .05 level of significance. A split-half reliability was calculated for this final set of items. The reliability score for this scale was .70.

As a result of this analysis some support seemed to exist for the first research hypotheses that there is a relationship between assignment of a respondent to LS2 by the three judges and the responses of the same individual to the ADI. In addition, it appeared that a scale on which LS2 people generally scored high and LS1 people generally scores lower might be able to be developed with considerably more research. The exploratory nature of the present study requires further refinement on the ADI if it is to be considered for use in future research in early adult development.

In addition to the major stated intent of construction of a LS2 scale, this study also dealt with a set of predictions about the relationship

between ADI LS2 scores and scores on particular OPI scales. Some support exists for the accuracy of the hypothesized direction of each of the OPI scale scores based on knowledge of LS2 score. A Pearson correlation procedure revealed that not only did it appear that the OPI scale scores were in the hypothesized direction in all eight cases, but in four of the eight cases the result was significant at the $p<.10$ or less.

In addition, a t-test was performed comparing the mean LS2 scores of high-scoring and low-scoring respondents for each OPI scale. Although the high and low groups differed significantly on only five of the eight scales, the direction of the scores was consistent with the hypotheses for all eight scales. It is suggested that further refinement of the ADI, as discussed earlier in this section, be attempted and these procedures be repeated. Based on the results of the present research neither hypothesis one nor hypothesis two was rejected. Further research is recommended to determine whether or not results support this action.

Research Questions

It appears that the research questions concerning which, if any, demographic data (e.g., sex, age, marital status) may affect LS2 score can not be answered from demographic data for respondents in this study. Some difference appeared to exist initially. However, upon more detailed analysis it was determined that the sample size and distribution would not permit any reasonable generalizations to be made. Some patterns that appeared to be generally descriptive of the sample were as follows: married respondents appeared to be approximately six years older than single respondents (married mean age approximately 27 years, single mean age approximately 21 years), married respondents with children appeared to have higher ADI LS2 scores than married respondents without children, married respondents with children appeared to be approximately two to three years older than married respondents without children, and females in general appeared to have lower ADI LS2 scores than males in general. Since the sample size and distribution prohibit generalizations,

answers to the original research questions will be limited to respondents in this study. The first question asked "Do males and females in the same chronological age range score differently on the ADI?" The results appear to indicate that females in general appeared to have lower ADI LS2 scores than males in general regardless of chronological age range.

The second research question asked "Are the mean chronological ages for each LS age range described by Sheehy different from the mean ADI LS age?" For the present sample it appeared that respondents in the age ranges described by Sheehy to represent each LS possessed ADI LS scores consistent with what would be expected of respondents of that age.

The next research question asked was "Do married and single people of the same chronological age range score differently on the ADI?" The data do not permit any conclusions to be drawn in this area for the sample.

The final question asked was "Do married people with children and married people without children of the same chronological age range score differently on the ADI?" In the present study married respondents with children appeared to have higher ADI LS2 scores than married respondents without children.

Recommendations for Future Research

Suggestions for future research to develop and strengthen the ADI include expansion of possible responses from true-false to a range (e.g., a Likert-type scale); inclusion of some control for total positive response frequency; the use of larger, more heterogeneous samples; and further analytical procedures with respect to what portion of the residual might be due to demographic variables and their interaction(s) with each

other. It may be of considerable value to conduct research on potential sex bias in the items as a result of either the wording of the items, or the LS characteristics as described by Sheehy (1976) expressing predominantly "masculine" values as determined by our culture, or some combination including both. Although some support seemed to be provided for the two research hypotheses, the exploratory nature of this study as well as the sample size and distribution are critical considerations in interpreting the results and drawing conclusions. Extensive research is recommended, with particular emphasis on the areas discussed here, before any substantive conclusions can be drawn.

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Appendix A

The announcement to classes will, as reasonably close as possible be:

Hi. For those of you who don't know me, my name is Gwen Hendrix. I am a graduate student in the College of Education here at K.S.U. Currently, I am working on a master's degree in counseling with the thesis option. Dr. _____has granted me permission to briefly explain my study to you and request your assistance as participants. First, I will briefly tell you about my topic. Then I will explain what you, as a respondent will be asked to do.

The topic for my thesis is an analysis of early adult developmental stages. I chose this topic because I believe that knowledge and an understanding of adult development is essential if counselors are to deal effectively with the problems encountered in adulthood. Historically, developmental theory has dealt primarily with the span of time from infancy through adolescence. More recently, work in developmental theory has dealt primarily with the span of time from middle adulthood on. In both instances, the time span between late adolescence and middle adulthood has received little attention. The purpose of my study is to attempt to add some measure of knowledge and understanding of this period of early adult developmental stages to the body of knowledge currently composing adult developmental theory.

The study requires gathering information about people in the early adult developmental stages. These people are usually about 18-32 years of age. Participants in the present study will be further

Appendix A - Continued

defined as individuals having lived in the United States culture since infancy.

The materials used in this study are a list of true/false statements, a description of current events in your life, and either the Omnibus Personality Inventory or some written responses to specific questions. These materials will be explained to respondents prior to administering them.

Administration of these materials will take approximately 60-75 minutes of your time and will be a one-time only experience. I know a student's time is a scarce commodity and I certainly appreciate the fact that there often doesn't seem to be enough of it. However, just 60-75 minutes of your time on a one-time only basis may help us increase our knowledge in the area of adult development.

Materials will be administered on a group rather than an individual basis. I have schedules of times (both in the day and night), places, and dates for administration of materials. If you are willing to participate in this study, please sign your name and write your telephone number of the schedule that best fits your availability.

If you are not familiar with the location listed, I'll be glad to tell you where it is. Also, if you wish to participate but are not available at a time already scheduled, please write your name, phone number, and time and date available on the blank page. I will contact you to confirm this appointment. Your help will be greatly appreciated, and individual interpretations of the materials used will be arranged upon request. (Pass schedules around). However, no individual data will be reported - only group data. Thank You.

Appendix B

STATEMENT OF INFORMED CONSENT

Your signature below this statement indicates your willingness to participate in a research project to be conducted by Gwendolyn Hendrix, a graduate student at Kansas State University, Manhattan, Kansas.

The purpose of this project is to gain information about the existence and interaction of factors in the development of your adults. Benefits are estimated to outweigh risks in this project as our knowedge of adult development is extended by such studies.

All data applicable to the undersigned will remain confidential and shall not be disclosed to persons other than Ms. Gwen Hendrix, the researcher on this project. To assure the confidentiality and anonymity of each participant, a code is used. Future use of data is identified by code numbers, and not individuals. Such coded information will be reported as grouped data or generalized results.

Each prospective project respondent is free to decline to complete the study, or an item, and should return the materials received from Ms. Hendrix. A final report will be available by May 9, 1977. Individual interpretations may be arranged by contacting the researcher by addressing a note to: Ms. Gwen Hendrix, P. O. Box 120, Chapman, Kansas 67431. Please state how you may be contacted to arrange for an appointment.

_____ _____

Date Research Respondent Signature

Appendix C

Instructions to OPI Respondents

"Each of you should have a pencil (indicate a supply of pencils furnished by the researcher) and a file folder containing the following items: a Statement of Informed Consent, an Adult Developmental Items (ADI) form, a form asking for certain demographic information, an Omnibus Personality Inventory booklet, and an Omnibus Personality Inventory answer sheet." These materials are to be completed in the order they appear. Once you have left each of the three questionnaires do not go back to it later.

"If any of you are missing any of these items, please let me know now so you can be provided with whatever items you do not have. (short pause) You will notice that there is a numerical code on all of your materials except the OPI booklet. The booklet is not coded because it will be used for other administrations. Therefore, please do not mark in the book. The purposes of this code are, to assure a match-up of responses to the materials, to provide a coded identity for future use of the data so that your name can be kept separate from the data, and to provide a source of information retrieval in the event some answers are uninterpretable."

"The first task is to read and sign the Statement of Informed Consent. The purpose of this statement is to briefly summarize this study, and advise you of your rights in connection with the study. Will everyone please read and sign the statement now? (pause) All data collected in this study will be coded and processed by myself. The code key, the responses, and the Statement of Informed Consent will all be kept separate from each other so that no one but the researcher could every identify any one piece of information."

Appendix C - Continued

"The next task will be to mark your responses to the Adult Developmental Items form. Instructions for marking this form appear on the form. We will go through the instructions together in a few minutes. This is an untimed exercise, so when you have completed marking your responses to these you may proceed to the following tasks."

"The third task is to complete the form requesting demographic data. The information requested here is self-explanatory and should only take a few minutes. When you have completed these questions you may proceed to the final task."

"The final task is the completion of the OPI. This is a personality inventory and is being used in this study to increase our knowledge in the area of early adult development. The inventory, like the previous items, is untimed so when you have answered these questions, please double check to be certain you have signed the Statement of Informed Consent, place all materials in the folder with the Statement of Informed Consent on top. Bring all materials and your pencil to the researcher and you will be free to leave."

"Before we begin, are there any questions? (short pause) If there are no questions now, but some occur later, please come to the desk or indicate desire for assistance by raising your hand and we will discuss them. Anyone wishing to know the results of their own OPI responses are encouraged to contact me after May 9, 1977, by addressing a note to me. My name and address appear in the Statement of Informed Consent. Please indicate that you wish to know the results of your OPI and tell me how to contact you to establish an appointment. If there are no questions, please begin."

Appendix D

Instructions to SSQ Respondents

"Each of you should have a pencil (indicate a supply of pencils furnished by the researcher) and a file folder containing the following items: a Statement of Informed Consent, an Adult Developmental Items (ADI) form, a form asking for certain demographic information, and a structured *Survey Questionnaire* (SSQ). These materials are to be completed in the order they appear. Once you have left each of the three questionnaires do not return to it later.

"If any of you are missing any of these items, please let me know now so you can be provided with whatever items you do not have. (short pause) You will notice that there is a numerical code on all of your materials. The purposes of this code are (1) to assure a match-up of responses to the materials, (2) to provide a coded identity for future use of the data so that your name can be kept separate from the data, and (3) to provide a source of information retrieval in the event some answers are uninterpretable."

"The first task is to read and sign the Statement of Informed Consent. The purpose of this statement is to briefly summarize this study, and advise you of your rights as participants. Will everyone please read and sign the statement now? (pause) All data collected in this study will be coded and processed by myself. The code, the responses, and the Statement of Informed Consent will all be kept separate from each other so that no one but the researcher could every identify any one piece of information."

"The next task will be to mark your responses to the Adult Developmental Items form. Instructions for marking this form appear on the top of the first page. We will review the instructions for all forms in a few minutes. This is an untimed exercise, so when you have completed marking

Appendix D - Continued

your responses to these you may proceed to the following tasks.

"The third task is to complete the form requesting demographic data. The information requested here is self-explanatory and should only take a couple of minutes. When you have completed these questions you may proceed to the final task.

"The final task is the completion of the Structured Survey Questionnaire. This Questionnaire, like the previous items, is untimed. When you have answered these questions, please double check to be certain you have signed the Statement of Informed Consent and place all materials in the folder with the Statement of Informed Consent on top. Bring all materials and your pencil to the researcher and you will be free to leave."

"Before we begin, are there any questions? (short pause) If there are no questions now, but some occur later, please come to the desk or indicate desire for assistance by raising your hand, and we will discuss any questions you may have. Anyone wishing to know the results of this study are encouraged to contact me after May 9, 1977, by addressing a note to me. My name and address appear on the Statement of Informed Consent. Please indicate that you wish to know the results of this study and tell me how to contact you to establish an appointment. If there are no questions, please begin."

Appendix E

Adult Developmental Items (ADI)

For each of the following statements, decide whether the item is true as applied to yourself, or false as applied to yourself. If the statement is true or mostly true as applied to yourself, place a T in the space in front of the statement. If the statement is false or not usually true as applied to yourself, place an F in the space in front of the statement. Remember, mark each statement AS IT APPLIES TO YOU! Mark the statements as quickly as possible. Do not spend too much time on any one statement.

____1. I am discarding some attitudes held by my parents as not appropriate for me. (LS1)

____2. I am shaping my dreams so I can better define my course in life. (LS2)

____3. I am laying the basic foundation for my permanent career. (LS2)

____4. I believe my parents try to influence what I do. (LS1)

____5. I see life as more complicated and painful now. (LS3)

____6. I place considerable value on support from my peers. (LS1)

____7. I have an inner conviction that my decisions about major aspects of my life are permanent. (LS2)

____8. I believe I am being tested in all my personal and interpersonal experiences. (LS2)

____9. I believe I must be more self-concerned now than I have been in the past. (LS3)

___10. I have some vague, but persistent feelings of having missed out on something in my life. (LS3)

Appendix E - Continued

___11. I am establishing my own beliefs. (LS1)

___12. I believe that succeeding on my job, in my school work, and maintaining my home are more important than analyzing what I believe and feel. (LS2)

___13. I believe my present goals are more realistic and less based on dreams than previous goals. (LS3)

___14. I have as much time as I need to achieve my goals in life. (LS1)

___15. I have to get away from my parents. (LS1)

___16. I will probably achieve career success more quickly and easily if I have a mentor. (LS2)

___17. I want to be independent, but at the same time, I want to merge with another. (LS1)

___18. I want to increase my efforts to identify and achieve those things most important in my life. (LS3)

___19. I think about marriage and a home of my own. (LS2)

___20. I sometimes feel more sure of what I don't want to do than what I do want to do. (LS1)

___21. I want to make some changes in my life. (LS3)

___22. I should do what is expected of me. (LS2)

___23. I feel I have matured beyond earlier choices concerning my personal and career life. (LS3)

___24. I believe this is a time when new choices can be made concerning my life. (LS3)

___25. I should fulfill my obligations to myself, my family, and society. (LS2)

Appendix E - Continued

___26. I am beginning to shift my emphasis from what I should do to what I want to do. (LS3)

___27. I think about questions like "Who am I?" quite a bit. (LS1)

___28. I am identifying my own sex role. (LS1)

___29. I have a sense of wanting to be more than I am. (LS3)

___30. I have been thinking about my marital status. (LS3)

___31. I am very close to my friends. (LS1)

___32. I should establish clear career goals. (LS2)

___33. I am concentrating on building a secure foundation for my future life. (LS2)

___34. I can be whatever kind of person I want to be. (LS2)

___35. I am seeking out my own truth. (LS1)

___36. I sometimes get simultaneous feelings of hitting rock bottom and having the urge to burst out. (LS3)

___37. I am searching for my own identity. (LS1)

___38. I should be starting my own family and really applying myself in my career/schoolwork. (LS2)

___39. I want to reassess my priorities. (LS3)

___40. I want to deepen my commitments in life. (LS3)

___41. I believe I can take as much time as I desire to work on projects of some interest to me. (LS1)

___42. I have a sense of not being everything I want to be. (LS3)

___43. I am with my friends as much as possible. (LS1)

___44. I should try to find a mentor to help me in my career development. (LS2)

Appendix E - Continued

___45. I sometimes have concurrent feelings about not being able to feel any lower and wanting to break away from everything. (LS3)

___46. I sometimes experience contradictory feelings of wanting to be on my own and yet wanting to belong to another person. (LS1)

___47. I have claimed control over at least one aspect of my life that my parents can't touch. (LS1)

___48. I am on trial. (LS2)

___49. I am preparing for my life work. (LS2)

___50. I have left some inner aspect out of my life. (LS3)

___51. I believe that my decisions about major aspects of my life are immutable. (LS2)

___52. I no longer believe will power and intellect can overcome all obstacles. (LS3)

___53. I think about various sex roles and discuss them with my friends. (LS1)

___54. Since I know what people expect of me, I should do those things. (LS2)

___55. I am beginning to realize that some things I want to do are more important to me than some things others think I should do. (LS3)

___56. I believe this is a time of considerable change in life for me. (LS3)

___57. I can explore and experiment with my life. (LS2)

___58. I am more interested in the externals of my life (job, school, home) than the internals (what I think, believe, feel). (LS2)

___59. I am searching for my course in life. (LS2)

___60. I think this is the time to settle down. (LS2)

Appendix E - Continued

___61. I now see that some information I received from my parents was based on their beliefs rather than fact. (LS1)

___62. I am ruling out somethings I know I don't want to do with my life. (LS1)

___63. I am separating my views from my parents' views. (LS1)

___64. I have considered changing my marital status. (LS3)

___65. I make my own decisions. (LS1)

___66. I believe now is the time to concentrate on my self more than I I previously done. (LS3)

___67. I am developing a peer group role. (LS1)

___68. I am building a firm, safe foundation for the future. (LS2)

___69. I need to put my plans into action. (LS2)

___70. I currently view life as less simple and pleasant than it previously was. (LS3)

___71. I feel too narrow and restricted. (LS3)

___72. I think about questions like "What is Truth?" quite a bit. (LS1)

Appendix F

Insert Appendix F, the Omnibus Personality Inventory, Form F, answer sheet

Appendix G

Structured Survey Questionnaire

Following these instructions you will find some general topics (underlined). Below each general topic you will find four specific sub-topics (numbered). In the blank space after each sub-topic explain how, in your own personal life, each sub-topic is related to the general topic under which it is listed. Make your comments as specific as possible, using examples from your personal experiences. For example, a person may comment on the relationship between the sub-topic Job/Career and the general topic Current Enrollment in College in the following manner: "I changed majors in college in order to ensure greater employment possibilities upon completing my course of study."

Current Enrollment in College

1. Job/Career-

2. Intellectual development-

3. Social life/Friends-

4. Parents-

Job/Career

1. Choice of job/career-

2. Job satisfaction-

Appendix G - Continued

Job/Career - continued

3. Importance of job security-

4. Relative importance of job/career as compared to other aspects of my life, such as family or social life-

Social Status

1. Importance of-

2. Parents-

3. Acquaintances-

4. Material possessions-

Plans for the Future

1. Importance of-

2. Degree to which defined-

3. Family-

4. Job/Career

Appendix G - Continued

Leisure Time

1. Importance of-

2. Amount of-

3. With whom spent-

4. Types of activities-

My Present Age

1. Health-

2. Inner feelings about my life-

3. As compared to another age-

4. My beliefs-

My Parents

1. Relationship with-

2. Similarity to me-

3. Awareness of my activities-

4. My life style-

Appendix G - Continued

Marriage

1. Importance of-

2. Marriage partner-

3. Children-

4. Security-

My Friends

1. Importance of-

2. Similarities to me-

3. Parents-

4. Amount of time spent with-

Appendix H

Rules for Selection and Training of Judges

I. Rules for Selection of Judges.

A. Choose only judges who have been or are currently enrolled in the Adult Counseling course offered at KSU, and who have read Sheehy (1976).

B. Secure raters who are willing to provide the necessary information without distortion.

C. To reduce contrast error try to use judges who themselves represent the entire range of the scale being used.

II. Rules for Training Judges.

A. Convince them of the value of honest and accurate ratings.

B. Point out types of errors raters are likely to make (halo error, leniency, rater-trait interaction).

C. Provide suggestions for avoiding types of errors judges usually make.

D. Provide practice under supervision by providing each judge a description of each LS being studied taken directly from Sheehy (1976). Discuss each description emphasizing the characteristics unique to each LS. Then, give each judge an SSQ that has been completed to describe a particular LS, for example LS2. Ask the judges to assign that individual to a LS based on SSQ responses. This result will then be discussed to establish better understanding and agreement among the judges. The procedure will be repeated for each of the remaining two life stages. An SSQ with responses characteristic of each of the three life stages will be used in the practice session, however, the judges will be led to believe that any particular set of SSQ responses has an equal chance of being either LS1, LS2, or LS3.

These rules for selection and training of judges are based on those of Helmstadter (1964, p. 197-198).

Appendix I

INSTRUCTIONS TO JUDGES

Research previously conducted on adult deve'opment has relied exclusively on open-ended interviews and/or interpretation of projective test material such as the TAT. Your task in this research study is to read the brief (approximately 1-3 sentences) answers of each respondent to some structured questions. Then, using your knowledge from the Adult Counseling course and the book Passages, you are to assign each respondent to one of three life stages: "Pulling Up Roots", "Trying Twenties", or "Catch-30". Your decision will be based on your judgement of the degree to which the respondents answers reflect a majority of the characteristics of the life stage to which you assign them.

"Pulling Up Roots" will be referred to as Life Stage 1 (LS1), "Trying Twenties" as LS2, and "Catch-30" as LS3. A master list containing a code number for each respondent has been provided for recording your assignment of respondents to life stages. When you have assigned a life stage to a respondent, place the appropriate LS designation on the master list by the code number for that respondent. Do not make any marks on the questionnaire. An outline of the most salient characteristics of each life stage is provided for your use in this task. In addition, SAMPLE questionnaires depicting each of the three life stages are provided as GUIDES in making your assignments. We will discuss these examples and resolve questions before you begin your task.

Appendix I - Continued

LIFE STAGES OUTLINE

I. "Pulling Up Roots" (LS1)

A. Breaking away from family

1. College

2. Military service

B. Search for:

1. "Truth"

2. "WHO AM I?"

c. Shifting emphasis from family supports to peer group as source of support

D. Establishing/confirming sex role identify

1. Sexual "peak" for men

2. Becoming sexually active

E. Periodic rebounds to the safety of the family

II. "Trying Twenties" (LS2)

A. Shaping one's dreams for the future

1. Decisions about one's life seem final/immutable

2. Major concern is with external factors of life:

a. Job

b. School

c. Home

3. No visible concern with the internal factors of life:

a. What one thinks

b. How one feels

Appendix I - Continued

II. "Trying Twenties" (LS2) continued

B. Initial thoughts of:

1. Career path
2. Marriage/children
3. A home of one's own

C. Prepare for "life work"

1. Find mentor
2. Career matters carry great priority (especially for men)

D. Form capacity for intimacy without losing consistency of self

E. Simultaneous impulses at work:

1. Build a firm, safe foundation for the future
2. Explore, experiment, keep structure tentative

F. Generally characterized by thoughts of what one "SHOULD" do as defined by:

1. Family models
2. Cultural press
3. Prejudices of peers

G. Identity states characteristic of this stage are:

1. Moratorium: delaying commitments while actively struggling to find "right" ones
2. Identity-foreclosed: accept identity ascribed by parents
3. Identity-diffused: become immobilized by feelings of inferiority or alienation in early attempts to define self; not in a state of crisis
4. Identity-achieved: has come through crisis and developed a sustained personal stance regarding sense of purpose and view of the world.

Appendix I - Continued

II. "Trying Twenties" (LS2) continued

H. Idealistic search for "one true course in life" characteristic of this life stage

III. "Catch-30" (LS3)

A. Feeling narrow and restricted is characteristic of this stage

B. Simultaneous feelings of:

1. Hitting rock bottom

2. Urge to "bust out"

C. Striking out on secondary road to "new vision"

1. Change careers

2. Return to college

3. Future plans based more on reality than ideals and dreams

4. Consider change in marital status

a. Divorce if married

b. Marriage/remarriage

D. New choices made about priorities (shift in emphasis of what is important in life).

E. Re-evaluation of intimate, social, and career commitments

1. Altered

2. Deepend

F. Beginning to change emphasis from what one "should" do as defined by others to what one wants to do

Appendix I - Continued LS1

STRUCTURES SURVEY QUESTIONNAIRE

Following these instructions you will find some general topics (underlined). Below each general topic you will find four specific sub-topics (numbered). In the blank space after each sub-topic explain how, in your own personal life, each sub-topic is related to the general topic under which it is listed. Make your comments as specific as possible, using examples from your personal experiences. For example, a person may comment on the relationship between the sub-topic Job/Career and the general topic Current Enrollment in College in the following manner: "I changed majors in order to ensure greater employment possibilities upon completing my course of study."

Current Enrollment in College

1. Job/Career: *"I enrolled in college to prepare for my life's work. In In addition, it is a good opportunity to establish my own identity."*

2. Intellectual development: *"I think college is mainly to help me know what truth is and how to develop my abilities required for my career."*

3. Social life/Friends: *"My friends are really important to me. They are quite a bit like I am. They have very similar beliefs and values."*

4. Parents: *"My parents try to encourage me to take courses for a career they want me to have. My education is helping me separate my beliefs from my parents."*

Job/Career

1. Choice of job/career: *"I have known for sometime what my life's work would be."*

2. Job satisfaction: *"This is the most important part of a job. Other things are important but not so much as this."*

Appendix I - Continued

Job/Career - Continued

3. Importance of job security: *"Job security will come with doing a good job in my field. It is a natural condition of enjoying what you do and doing it well."*
4. Relative importance of job/career as compared to other aspects of my life, such as family or social life: *"If I don't get established in a job, then I won't be in a position to provide for social or family life."*

Social Status

1. Importance of: *"Social status is not as important as getting along well with the friends you have and broadening your acquaintances."*
2. Parents: *"Social status is a factor in my parents relationship. They are more conscious of it than I."*
3. Acquaintances: *"The majority of my associates feel the same way I do about it. "*
4. Material possessions: *"Only important possessions are what are required to sustain my life."*

Plans for the Future

1. Importance of: *"They are important, but I have a long, long time to accomplish them."*
2. Degree to which defined: *"Really beginning to take shape. However, still a little unsettled in some areas."*
3. Family: *"My family is trying to influence what I will do, but I will make my own decisions."*
4. Job/Career: *"These are important, and probably getting clarified more quickly than other areas."*

Appendix I - Continued

Leisure Time

1. Importance of: *"I really need time to get away and relax"*

2. Amount of: *"I try to make sure I have some time because it is pretty important."*

3. With whom spent: *"Mostly with friends, some time alone."*

4. Types of activities: *"Mostly outings, sports, hobbies, socializing with friends."*

My Present Age

1. Health: *"Very good."*

2. Inner feelings about my life: *"Questioning who I am and really trying to develop my own beliefs. Considerable confusion and conflict."*

3. As compared to another age: *"I would sometimes like to be older but generally this seems like the best time of my life."*

4. My beliefs: *"Are becoming more crystalized. They are forming the basis for my future development."*

My Parents

1. Relationship with: *"Sometimes good, sometimes strained. I'm trying to establish a more mature relationship with them, but they still often treat me as a child."*
2. Similarity to me:
"Similar in basics, but different in even increasing ways."

3. Awareness of my activities: *"I generally try to keep my activities to myself, although I sometimes discuss them in general terms."*

4. My life style: *"Is somewhat different from theirs because different things are important to us."*

Appendix I - Continued

Marriage

1. Importance of: *"Not particularly important right now. First need to establish what I expect from it."*

2. Marriage partner: *"Someone like myself so we can enjoy the same things together."*

3. Children: *"Will be an important part of my future."*

4. Security: *"Security of the relationship is more important than of the marriage per se."*

My Friends

1. Importance of: *"Very important to me. Help me share new experiences and understand what's going on."*

2. Similarities to me: *"Similar to me in most important ways but have diverse backgrounds and ideas."*

3. Parents: *"Sometimes my parents don't understand or approve of my friends."*

4. Amount of time spent with: *"I speand as much time as possible with my friends."*

Appendix I - Continued LS2

STRUCTURES SURVEY QUESTIONNAIRE

Following these instructions you will find some general topics (underlined). Below each general topic you will find four specific sub-topics (numbered). In the blank space after each sub-topic explain how, in your own personal life, each sub-topic is related to the general topic under which it is listed. Make your comments as specific as possible, using examples from your personal experiences. For example, a person may comment on the relationship between the sub-topic Job/Career and the general topic Current Enrollment in College in the following manner: "I changed majors in order to ensure greater employment possibilities upon completing my course of study."

Current Enrollment in College

1. Job/Career: *"Taking additional courses to help me advance in my chosen career."*
2. Intellectual development: *"Should be left to philosophers. College is for helping one gain success in chosen career."*
3. Social life/Friends: *"Still have a few friends from college. Social life more diverse than just college friends though."*
4. Parents: *"My parents were generally supportive of my enrollment in college."*

Job/Career

1. Choice of job/career: *"One of most important choices in life because it has great permanence."*
2. Job satisfaction: *"Is dependent upon how quickly one can advance and climb the ladder of success."*

Appendix I - Continued

Job/Career - Continued

3. Importance of job security: *"Important because total existence and most of things one wants in life depend on it."*

4. Relative importance of job/career as compared to other aspects of my life, such as family or social life: *"Most important right now."*

Social Status

1. Importance of: *"It is important if one is concerned in 'getting ahead'."*

2. Parents: *"My parents and I generally agree on the relative importance and merits of social status."*

3. Acquaintances: *"Are generally from the same social level and have very similar ideas."*

4. Material possessions: *"Certainly a mark of success."*

Plans for the Future

1. Importance of: *"Really critical. Need definite 'road map' for career and family paths."*

2. Degree to which defined: *"Well-defined, permanent."*

3. Family: *"Surprisingly compatible with what my parents wanted for me when I was younger."*

4. Job/Career: *"Specific plans on how to obtain promotions and gain success."*

Appendix I - Continued

Leisure Time

1. Importance of: *"Mostly spent with business associates. Don't seem to have too much (sometimes not enough). Not as important as succeeding in my career."*
2. Amount of:
   "Not much."

3. With whom spent: *"Mostly business associates; people with same interests and priorities."*

4. Types of activities: *"Nothing strenuous but generally with a group of associates."*

My Present Age

1. Health: *"Generally excellent."*

2. Inner feelings about my life: *"Not a critical issue now, career and success plans more important."*

3. As compared to another age: *"The very best time (although sometimes career concerns frustrate me)."*

4. My beliefs: *"Well-established; much like my parents and associates. Not too liberal or too conservative."*

My Parents

1. Relationship with: *"Improved generally from earlier years. Seems they are becoming more like friends."*

2. Similarity to me: *"More similar than I even remember them being."*

3. Awareness of my activities: *"Generally aware of what is important to me, but usually relatively uninvolved."*

4. My life style: *"A lot of similarities to my parents life style."*

Appendix I - Continued

Marriage

1. Importance of: *"I need to be seriously considering marriage and a home of my own."*

2. Marriage partner: *"Someone who will fulfill my needs and desires and help me achieve success."*

3. Children: *"Important now. Should definitely be establishing family plan and development."*

4. Security: *"One of the most important aspects of marriage."*

My Friends

1. Importance of: *"Most important ones are those who can help me achieve success. Share importance with business associates and family."*

2. Similarities to me: *"Very similar"*

3. Parents: *"Generally my friends and parents get along well and share similar views. My parents becoming more like friends than in past years."*

4. Amount of time spent with: *"Not as much as previous years, no time for this."*

Appendix I - Continued LS3

STRUCTURES SURVEY QUESTIONNAIRE

Following these instructions you will find some general topics (underlined). Below each general topic you will find four specific sub-topics (numbered). In the blank space after each sub-topic explain how, in your own personal life, each sub-topic is related to the general topic under which it is listed. Make your comments as specific as possible, using examples from your personal experiences. For example, a person may comment on the relationship between the sub-topic Job/Career and the general topic Current Enrollment in College in the following manner: "I changed majors in order to ensure greater employment possibilities upon completing my course of study."

Current Enrollment in College

1. Job/Career: *"Necessary career concerns/changes are better prepared for by returning to school."*
2. Intellectual development: *"Dependent upon getting more from college than just grades."*
3. Social life/Friends: *"Social life not as pleasent or frequent as in past. Friends and I don't seem to have as much in common as previously."*
4. Parents: *"Little or no relationship generally."*

Job/Career

1. Choice of job/career: *"Original choice now seen as not 'life's work'."*
2. Job satisfaction: *"Critical factor in performance and success. If not satisfied, change."*

Appendix I - Continued

Job/Career - Continued

3. Importance of job security: *"Have mixed feelings. Becoming important in sense that newer more realistic goals/ambitions require change or adjustments to provide real security."*
4. Relative importance of job/career as compared to other aspects of my life, such as family or social life: *"Becoming relatively equal concerns. Have a feeling of missing something in both areas."*

Social Status

1. Importance of: *"I have more important things to be concerned with."*
2. Parents: *"More concerned with how I feel about subject than how they feel."*
3. Acquaintances: *"More and more diverse experiences are expanding my circle of 'unique' acquaintances."*
4. Material possessions: *"Important only if I don't have what I need to be comfortable."*

Plans for the Future

1. Importance of: *"Since this may be period for 'final' set of plans and changes occuring in many areas, future plans are important but more flexible than in past."*
2. Degree to which defined:
   "Searching for appropriate re-definitions."
3. Family: *"Seems more distant than previously. Beginning to require more concern and planning for aging parents and/or developing children."*
4. Job/Career: *"Plan on changing approach to present career or changing careers altogether.*

Appendix I - Continued

Leisure Time

1. Importance of: *"Need time to re-organize self andlife structure."*

2. Amount of: *"Increased demands and age seem to take significant toll."*

3. With whom spent: *"No particular person or group."*

4. Types of activities: *"Thinking, studying, reading, talking, interpersonal activities."*

My Present Age

1. Health: *"Still good, but seem to be developing areas of concern."*

2. Inner feelings about my life: *"I've really missed out on something. I feel narrow and restricted."*

3. As compared to another age: *"More painful and less pleasant than previous time."*

4. My beliefs: *"In turmoil or at least considerable confusion. Beginning to believe what I wantmore important than what I 'should' do."*

My Parents

1. Relationship with: *"Difficulty communicating."*

2. Similarity to me: *"Not much."*

3. Awareness of my activities: *"Only generally if at all."*

4. My life style: *"Is my own and separate from theirs. More tentative and less settled."*

Appendix I - Continued

Marriage

1. Importance of: *""Really question this."*

2. Marriage partner: *"Needs to be someone who compliments me and with whom I can develop."*

3. Children: *"Time getting short. If going to have children need to start now."*

4. Security: *"Lies in our individual sense of self and security."*

My Friends

1. Importance of: *"One or two close friends are really important."*

2. Similarities to me: *"Not as much as in past."*

3. Parents: *"Little or no relationship to/with my friends."*

4. Amount of time spent with: *"Getting less and less at this time in my life."*

Appendix J

Demographic Data

Unless otherwise instructed, place a checkmark or "X" on the appropriate line for each numbered item.

1. Sex: ____Male ____Female

2. Educational Classification:

   ____College Freshman ____Masters level graduate student

   ____College Sophomore ____Ph.D. level graduate student

   ____College Junior ____Other. Explain:_____

   ____College Senior _____

3. Number of credit hours currently carried:_____

4. Hours per week worked on job for pay:_____

5. Date of birth:____Month ____Day ____Year.

6. In what state (or country, if outside the U.S.A.) did you live the majority of time until you were 18 years of age?_____

7. Did you live in mainly rural or mainly urban surroundings the majority of time until you were 18 years of age?

   ____Mainly rural ____Mainly urban

8. Do you consider yourself to be a member of any ethnic or cultural group? If yes, please identify,_____

9. Current marital status:

   ____Single, Never Married ____Married

   ____Single, Divorced ____Married, Separated

   ____Single, Widowed

10. Marriages:

    Number of marriages____ Age at each marriage_____

Appendix J - Continued

11. Children:

Number of children____ Ages of children_____

Appendix K

FINAL LS2 SCALE

(T) 1. I have an inner conviction that my decisions about major aspects of my life are permanent.

(T) 2. I believe that succeeding on my job, in my schoolwork, and maintaining my home are more important than analyzing what I believe and feel.

(F) 3. I have as much time as I need to achieve my goals.

(T) 4. I should do what is expected of me.

(F) 5. I believe this is a time when new choices can be made concerning my life.

(T) 6. I should fulfill my obligations to myself, my family, and society.

(F) 7. I am beginning to shift my emphasis from what I should do to what I want to do.

(F) 8. I think about qyestions like "Who am I?" quite a bit.

(F) 9. I am identifying my own sex role.

(T)10. I am concentrating on building a secure foundation for my future life.

(F)11. I am seeking out my own truth.

(T)12. I should be starting my own family and really applying myself in my career/schoolwork.

(F)13. I sometimes have concurrent feelings about not being able to feel any lower and wanting to break away from everything.

(F)14. I sometimes experience contradictory feels of wanting to be on my own and yet wanting to belong to another person.

(T)15. Since I know what people expect of me I should do those things.

(F)16. I believe this is a time of considerable change in life for me.

Appendix K - Continued

(T)17. I am more interested in the externals of my life (job, school, home) than the internals (what I think, believe, feel).

(T)18. I think this is the time to settle down.

(F)19. I am ruling out some things I know I don't want to do with my life.

(F)20. I have considered changing my marital status.

(F)21. I believe now is the time to concentrate on my self more than I have previously done.

(T)22. I need to put my plans into action.

TABLES

TABLES

LIST OF APPENDICES