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AN EXAMINATION OF ERIKSONIAN EGO IDENTITY VERSUS DIFFUSION PRECEDING RETIREMENT

The Ohio State University

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AN EXAMINATION OF ERIKSONIAN
EGO IDENTITY VERSUS DIFFUSION PRECEDING RETIREMENT

DISSER TATION

Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy in the Graduate School
of The Ohio State University

By
Kenneth Alan Holstein, B.A., M.A.
The Ohio State University
1981

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CHAPTER I
INTRODUCTION

This is a study of identity during retirement. Specifically, it is an exploration study of the identity status of retirement age males as they confront the act of retiring.

This research has its theoretical roots in Eriksonian psychology and its empirical foundation in the research of Marcia (1966, 1967), Waterman and Waterman (1971, 1972, 1974), and Whitbourne and Weinstock (1979), among others.

Erikson postulated eight dichotomous, sequential psychosocial crises that must be dealt with throughout the life cycle. The crisis most germane to this study is the proposed identity crisis of the adolescent. According to Erikson, the adolescent must come to an understanding of who he or she is. An evaluation of thoughts and feelings regarding occupation and ideology (religion and politics) serve as the criteria for this encounter. Satisfactory completion leads to a stable and continuous identity, while an unsatisfactory resolution leaves one with uncertain boundaries and unanswered questions regarding their individual destiny.

James Marcia (1966, 1967) has made several attempts to operationalize and extend Erikson's hypotheses. In early attempts, while conducting identity interviews, Marcia discovered that evaluation of identity on a single dimension, with achievement and diffusion at the
poles, ignored the significant interaction between crisis and commitment. Marcia felt as though both crisis and commitment should be evaluated in determining one’s identity. To test this hypothesis, Marcia interviewed college males and evaluated their identity status on both of these dimensions. In addition, Marcia also sought to validate these identity statuses and subsequently administered a number of task variables which had theoretical significance to the identity question. Marcia hypothesized that if the identity statuses were significantly independent it would be reflected in performance on the various tasks. Marcia’s initial hypotheses were confirmed, and subsequent research has indicated the existence of four distinct identity statuses: identity achieved (defined as individuals who have experienced both a crisis and made a commitment); foreclosed, those individuals who have had no crisis, but made a commitment; moratorium, those people who are currently experiencing crisis, but have not made any commitments; and diffuse, individuals who have experienced no crisis, nor made a commitment.

In that regard, research is currently being conducted in an effort to identify additional differences between the statuses. In addition, several authors have made an effort to extend the identity research into adulthood. For example, Marcia re-interviewed his original sample 6 years later in an effort to explore the relationship between identity and intimacy (Erikson’s sixth crisis period). His results showed no direct relationship between identity, and in fact, he found that only for those individuals who had remained identity achieved was there a relationship to intimacy.
Waterman and Waterman (1974) compared two generations, fathers and sons, on the identity interview. They were ultimately looking for a relationship between the father's and son's identity status. They found none. Instead, they found that most of the adults in their sample were now foreclosed in their adult roles. In an effort to explain these unexpected findings, they concluded that a foreclosed status was highly adaptive for an adult, more so than the identity achieved status. These results have caused some speculation that identity during adulthood is not the construct it was in the earlier years.

Whitbourne and Weinstock (1979) and Amstey and Whitbourne (in press) have made the first significant attempt to define adult identity issues. Initially, they examined housewives who had enrolled in continuing education classes at a large university. They discovered that those individuals who had enrolled, who were attempting something new (college classes) were significantly more likely to be in the moratorium status, while the control group, housewives who had not enrolled in continuing education, were more likely to be either achieved or foreclosed. These findings led to the conclusion that any event, which was perceived by the individual to represent a significant change in lifestyle, was likely to produce a resultant change in identity status.

Based on that assumption, this study has attempted to examine the identity status of male adults who are facing the act of retirement. Although recent research has indicated that retirement is probably not a particularly traumatic or devastating event for most men, it does,
however, represent a significant change of routine and status from the previous 40 or more years. Retirement does force an individual to re-evaluate his role in society, his options for the future, and his plans to spend the time previously devoted to work.

Adult males, within 2-3 years of retirement were given a modified version of the Marcia identity interview. Based on the results of that interview subjects were assigned to an identity status. Since this is the first attempt to examine retirement in this fashion, an effort was made to validate the identity statuses. Therefore, interviewees were also given two of the task variables which have been found to differentiate between the statuses: the stressful concept attainment task; the authoritarian-submission scale. In addition, a life satisfaction measure was included as a simple measure of ego integrity (Erikson's eighth crisis period). Also information on several demographic, subject variables (occupational level, time until retirement, and whether retirement was forced or voluntary) was obtained. Ward (1979) and Streib and Schneider (1971) have reported that these variables have a significant relationship to attitude toward retirement and adjustment to retirement. These variables were to be examined in relation to identity status.

Finally, a sample of adolescent males were interviewed, using the original Marcia interview to re-validate the instrument, as it was first used in 1965. In addition, a comparison of the adult and adolescent data was made in an effort to determine if change in identity is a function of age, or, in other words, a developmentally related change.
The hypotheses to be tested in this project are as follows:

1) Pre-retirees will be classifiable into identity statuses. These statuses will be differentiated by their performance on the two task variables:
   a) Identity achieved individuals will score higher on the concept attainment task than any of the other statuses.
   b) Foreclosed individuals will endorse authoritarian values to a greater extent than will the members of the remaining statuses.

2) Identity achieved will report the highest levels of life satisfaction (ego integrity). Since they are more able to see themselves as retirees, as fitting into the role of a retiree, they will more likely feel a continuous relationship with the past and more satisfied with what the future holds.

3) The subject variables will show these relationships with identity status:
   a) Subjects with less time on the job (1 year or less) until retirement, will be more likely to have spent time thinking and planning about their retirement. They will be more likely to have achieved or foreclosed upon an identity about retirement. Subjects with more time until retirement (1 year or greater) will be less likely to have specific plans regarding retirement, since its onset is not imminent. Their feelings and plans will be more vague and uncertain. These individuals will be more likely to be in the moratorium or diffusion categories.
b) Individuals in the professional positions because of higher intrinsic interest in their jobs, and those individuals in the lower occupational positions because of financial concerns, will be more likely to express real concerns and regrets about retirement. They will be more likely to be in the moratorium and diffusion statuses, finding it more difficult to really look forward to retirement.

No other hypotheses were predicted.
Erik Erikson (1956, 1963, 1968) has hypothesized a comprehensive life-span approach describing personality development. Combining the essentials from psychoanalytic theory with his own belief system, Erikson visualized the ego emerging from the interaction of the individual with the environment. Erikson hypothesized eight stages of ego development. Each stage is characterized by crisis and resolution along a dimension anchored at each end by polar opposites of ego quality. The resolution of each crisis is influenced and determined by an interaction between the equipment that a particular individual possesses (e.g., potential, previous experience, temperament, etc.) and the specific environment in which the crisis unfolds. At any particular time an individual's environment may also include not only a personal environment, but one that society imposes, as well. This environment may include sanctions, expectations, and explicit, as well as implicit, assumptions regarding performance (e.g., resolution). Erikson saw the particular resolution of a given stage as being distinctively important in that a successful resolution resulted in a qualitatively different residual attitude (or approach) toward life than did an unsuccessful one. These attitudes not only affected the fashion in which a person met immediate environmental and personal events, but also those events encountered at a later time (e.g., later
later ego crises).

The initial crisis, trust versus mistrust, addresses the problem of the newborn infant's attempt to understand the environment. Lacking those skills essential for survival the newborn must rely upon caregivers to provide for basic needs. To the extent that these and other needs are met, the infant learns that placing trust in the caregiver is warranted. To the extent that these needs are either ignored or met in an unsatisfactory fashion, an attitude of mistrust develops. In articulating the importance of a quality relationship during the initial year of life, Erikson saw both immediate and long-term consequences of that resolution; a child (and later an adult) who trusts his or her environment versus one who does not.

Although each of the eight stages are interrelated, the effect of one stage upon another is not necessarily immediate or direct. In that regard, Erikson (1959) indicated that each successful resolution resulted in an increase of ego strength. The greater the accumulation of ego strength, the greater the likelihood of successful resolutions of subsequent crises. Negative resolutions depletes the individual of needed ego strength and increases the probability of unsuccessful resolution of later crises.

The crisis developing during the adolescent years is learning one's own identity, which includes establishing a feeling of sameness over time (continuity), a feeling of meaning in the present, some direction for the future, and some indication that who one is can be shared with others. Erikson also felt that an individual's identity was more than a mere summation of earlier identities, and that it
also included qualitative evaluations and adjustments to new circumstances as well.

The importance of establishing continuity, which Erikson saw as providing meaning to life, is especially noticeable in the areas of occupation and life style. An adolescent who resolves this crisis, who finds an occupation and ideology that provides continuity, achieves identity. The individual who does not loses contact with previous identities, does not establish new, meaningful relationships, and is, therefore, a diffuse, identity-less person.

I. Early Verification Studies

In the years following Erikson's initial writings, there have been various attempts to find objective support for the identity crisis. Below, several of these early attempts are presented and discussed. The reader should be aware that often the only similarity between these studies lies in their attempt to find empirical validation of Erikson's theory. Beyond that, the methodology, the instruments and the subjects themselves are remarkably dissimilar. In an attempt to establish some continuity in the presentation of this material this review is a chronological presentation of these early studies. Hopefully, this will provide the reader with an historical perspective of the literature most germane to this project.

In one of the earliest attempts of verification, Bronson (1959) used an interview approach to assess a number of variables: self-evaluation, the presence and type of aspirations and ideals, reactions to other people, and child peer and parental relations. From this interview, the author attempted to identify individuals' continuity
with the past, the degree of tension or anxiety present, certainty of self-concept, and temporal stability of self-rating. The results showed that subjects who lacked a stable foundation for currently professed self-conception showed less certainty about dominant characteristic of self, greater variability through time in feelings about the self, and were significantly more anxious. Identity achieved individuals exhibited none of the characteristics mentioned above. Bronson concluded that his findings supported an Eriksonian perspective of identity development. This study is particularly distinctive because, more than any of the other early studies, it includes several subjective measures in its evaluation (e.g., self-evaluation, reaction to others). It was an honest effort to remain true to the psychoanalytic "feeling" of the Eriksonian perspective, while attempting to establish empirical validation of the identity crisis. The later studies replaced these subjective indices with more objective measures.

Using a Q-sort and falsified personality sketches, Greun (1960) examined subjects' resistance to change when exposed to discrepant information about their personality. He reasoned that the stronger the ego identity, the more stable the personality, the less likely a person would be to accept others evaluations of their own personality, particularly if they were discrepant.

Subjects were college students, aged 18-24. Results tentatively confirmed Greun's hypothesis. Subjects with low self-ideal discrepancy (high ego identity) were less likely to accept discrepant information from a stranger than were subjects who manifested high self-ideal discrepancy.
Examining another dimension of Eriksonian identity, continuity, Block (1961) studied the relationship between role rigidity and role diffusion. Block determined that individuals who showed high role variability, who did not see themselves as responding consistently across situations, would exhibit higher levels of maladjustment (role diffusion). Block used an adjective checklist to measure role variability and the California Psychological Inventory to approximate level of maladjustment. Block's major research hypothesis was confirmed. Subjects who saw themselves as more variable from interaction to interaction also scored higher on the maladjustment scale. Block interpreted this as evidence that role stability (one dimension of ego identity) is related to personality adjustment.

In an attempt to assess the relationship between ego identity and daily functioning, Rasmussen (1964), using 1400 male navy recruits, compared ego identity level (measured by adjective checklist) and degree of self-acceptance. He hypothesized that individuals with more adequate personalities would have higher levels of ego development. In this same study, Rasmussen also hypothesized that positive resolution of earlier crises would effect the resolution of later crises.

Rasmussen reported confirmation for the initial hypothesis, but not for the second. Positive resolution of earlier crises did not affect resolution of the current crisis, with one noticeable exception. Rasmussen found a strong relationship between mistrust and identity diffusion. Individuals who had resolved the trust versus mistrust crisis in a negative fashion were more likely to be diffuse in regard to identity. The author concluded that the negative findings
for the second hypothesis might be attributable to: a) the insensitivity of the instruments; b) the nature of the sample (individuals who had not resolved young adult crisis); c) inaccuracy of Eriksonian theory. The author states a preference for either of the initial interpretations and directs attention to the success of the first hypothesis as providing objective support for the theory. The reader should be aware, however, that some non-supportive data exist.

Constantinople (1969) examined personality development and resolution of industry, identity, and intimacy crises in college students. Constantinople administered a modified Q-sort (Weissman and Rick, 1966) of 60 items reflecting successful resolutions of Erikson's initial six stages, to subjects from four (freshman, sophomore, junior, and senior) college classes. In addition, a follow-up study was attempted one and two years following the initial administration, to those students who were still undergraduates at the university.

Results indicated a general increase in the number of successful resolutions and a decrease in the number of unsuccessful resolutions with increasing age. Constantinople indicated that these results were as expected. It is apparent from the data, that seniors scored significantly higher than freshmen on successful resolutions of industry and intimacy and significantly lower on unsuccessful resolutions of inferiority. These results suggest that, at least for men, regular changes in industry and identity do occur. The longitudinal data also support the cross-sectional results. The number of successful resolutions of identity were higher than industry for all 4 years,
although this was only true for males. Feelings of inferiority, diffusion, and isolation all peak in the freshmen year, for males, the sophomore year for females, and dissipate thereafter. It is important to note, however, that these results show a much stronger relationship for males than females. The author attributed this trend to the salience of the college atmosphere producing changes in males and not females. She concluded that the primary objective in college is different for males than females (finding an occupation versus finding a mate). Therefore, it is more likely that a college environment, with its emphasis on career choice, would produce identity changes in males and not females. Although the accuracy of this evaluation is suspect, it is an interpretation offered by the author to account for the sex differences observed in this study. The validity of this interpretation will be addressed more fully later in this review.

In one of the few early studies that exclusively examined college aged women, Howard and Kubris (1969) looked at ego identity, measured by a 50 item questionnaire, which sampled several related personality dimensions: manifest anxiety, hostility, mother-daughter problems, and identity traits. The authors concluded that: a) sophomores had higher identity scores than freshmen; b) sophomores had lower scores on anxiety, hostility, and mother-daughter problems. Howard and Kubris interpreted these results as supportive of Eriksonian theory. They pointed out that the negative correlation between ego identity and anxiety indicates that the more cohesive the personality, the less anxiety the person manifests, the more "together" the individual
These early attempts, while differing somewhat in instrumentation, do exhibit some initial support for the validity of Erikson's stages of personality development. Research appears to indicate that those individuals who have been classified as identity achieved (by whatever method) either possess the characteristics described or alluded to by Erikson (e.g., lower levels of anxiety, less hostility) or they exhibit behaviors one would expect of an achieved individual (resistance to change).

The data which appears to be non-supportive (e.g., continuity of the crises), while not to be ignored, seems to be more a function of insensitive or unsophisticated instruments, rather than any real discrepancy or miscalculation of theory. Therefore, it would appear as though the initial attempts to provide objective support for Erikson's identity crisis have been successful, both in providing confirming data for the theory, as well as giving direction for additional research.

II. Marcia's Contribution

The studies cited above, have primarily focused on the intrapsychic, interpersonal characteristics that one should possess at various levels of identity. They do not, however, address themselves to the behavioral consequences of the identity issue. Except for Greun (1960), they do not identify the specific behaviors, or actual levels of performance on related measures or tasks that might be expected, given that a person had reached a specified level of ego identity. James Marcia (1966) hypothesized that not only were intrapsychic characteristics
related to identity development, but also that a relationship existed between ego identity and behavior. Marcia suggested that individuals who were identity achieved would be readily identifiable by their performance on various behavioral dimensions hypothesized as being related to identity. In the same regard, individuals who were at other levels of identity development, would be equally as recognizable by their performance on the same variables. To test this notion, Marcia devised a semi-structured interview and an incomplete sentence task to assess individual ego identity status. These indices were an attempt to assess the presence or absence of crisis and commitment in each of three content areas: occupation, religion, and politics. Assignment to a particular identity status was based on the results of an interview and the incomplete sentence task. In addition, he evaluated subjects' performance on several variables (behavioral dimensions) which he believed were related to ego identity and would differentiate between levels of identity development.

A major focus of this study was to find objective support for an interaction between the crisis and commitment issues of the identity issue. In pilot studies, Marcia had interviewed individuals who, by Eriksonian definition, were identity achieved. They were committed to specific occupational and/or ideological plans and were living out the results of those choices. Marcia noted, however, that often very different paths to the same end had been traveled. For one individual, the time of occupational choice and ideological choice had been a time of crisis, of actively searching for alternatives until the "right" one(s) had been discovered. These individuals Marcia later
called identity achieved. For others, however, there never had been a time of active debate among possibilities. An occupation (and ideology) had been chosen very early in life and had the designs and influence of parental goals and values. For many of these individuals it was extremely difficult to determine where parental values ended and their own began. These persons tended to possess very rigid belief systems and had great difficulty considering views in opposition of their own. These individuals, instead of achieving an identity through struggle, had merely adopted one directed by their parents and were termed foreclosed. Evaluating the diffusion end of the continuum, Marcia noted that some individuals had not made any choices regarding occupation or ideology, and appeared to exhibit little concern regarding their lack of direction of commitment. They were happy (or at least not unhappy) in their lack of commitment. In addition, they had either experienced no crisis, or only an inconsequential one, which had little or no direct effect on their lives. These individuals were called identity diffuse. Still others were currently involved in the struggle to establish what they believed, but, as yet, had not formed a commitment either to occupation or ideology. They were currently in crisis. These individuals were attempting to find an expression of parental goals and values within the strength and limitation of their own experience. In addition, the lack of commitment was a source of concern. They were sincerely, interested in finding something worthwhile in which to invest their time and energy. Marcia called these individuals "moratoriums" and further indicated that these individuals tended to exhibit high levels of anxiety over their
indecision, particularly when discussing them with others. Below is a graphic representation of Marcia's conceptualizations.

<table>
<thead>
<tr>
<th>Identity</th>
<th>Crisis</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieved</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Foreclosed</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Moratorium</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Diffuse</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

This diagram accurately represents Marcia's writings in that identity achieved and experienced a crisis and made a commitment; moratoriums have experienced a crisis, but have not made any commitment. Foreclosed have not had a crisis, but have made a commitment, and the diffused have neither had a crisis nor made a commitment. Marcia proposed that by evaluating individuals on both the crisis and commitment dimensions of identity that a more accurate interpretation and assessment of the effects, processes, and results of the identity crisis could be obtained.

In his initial study, Marcia (1966) examined the relationship of ego identity development and several behavioral measures, which included a concept attainment task given under stressful conditions (Bruner, et. al., 1956), a level of aspiration measure, a measure of authoritarianism and submission (Adorno, et. al., 1950), and a measure of stability of self-esteem under threat of invalidating circumstances. Each measure was selected for its particular relationship to ego identity. For example, a measure of authoritarianism was selected to evaluate the strength of the foreclosures' unquestioning adoption of parental (authoritarian) values and beliefs. It was hypothesized that
individuals from the other statuses would not endorse authoritarian values to the extremes that foreclosures would because, theoretically, and by definition, the foreclosure status contained subjects who had adopted attitudes and values reminiscent of their parents.

Marcia (1966) stated several specific hypotheses regarding the relationship between levels of identity development and the task behavioral variables examined: 1) High ego identity subjects would achieve better scores on the stressful concept attainment task in that they would be less vulnerable to evaluation apprehension; 2) High identity subjects would set more realistic goals in that high ego strength is related to a more accurate ability to test reality; 3) Foreclosures will endorse authoritarian values to a greater extent than the other statuses; 4) There will be a significant positive relationship between ego identity and self-esteem; 5) High ego identity subjects will change evaluations regarding the self less when given false information about their personalities.

Results of Marcia's study indicated that: a) on the concept attainment task, identity achieved subjects scored significantly higher than the other statuses, separately and combined. Moratorium subjects were significantly more variable in their overall scores than were any of the other statuses; b) on the level of the aspiration portion of the concept attainment task, foreclosures exhibited higher discrepancy scores than did identity achieved subjects and higher discrepancy scores than the other statuses combined. Foreclosure subjects were more likely to maintain high goals in spite of failure; c) on the authoritarian and submission measure, foreclosures obtained
significantly higher scores than identity achieved subjects, and the other statuses combined.

Marcia interpreted these results to show at least partial support for his hypotheses. He pointed out that the observed positive relationship between the performance on the concept attainment task (hereafter, the CAT), a measure which required an individual to respond simultaneously on an internal, interpersonal level (anxiety) and a behavioral, external one (completion of the task), and on the psychosocial measure (the interview), indicated that an association does exist between the two domains (Marcia, 1966). Additionally, the high scores of the achieved subjects on this measure, indicating positive adjustment, and the variable scores of the moratoriums, indicating an overall uncertainty regarding the specific direction of their life, also provide some objective support for those statuses. Further, the fact that moratorium and achieved individuals score very similarly on many of the other dimensions lead to a conclusion that crisis is a salient dimension in the life of the adolescent.

Finally, the foreclosures' adoption of authoritarian values were as predicted, and their willingness to maintain high levels of aspiration with repeated failures is symbolic of the "low freedom of movement" (Rotter, 1954) felt by members of this status. This finding was seen as indication of the strength of the parental ego in the foreclosure.

Marcia concluded that the results of this study exhibited support for his classification of identity into statuses, and that they also gave credence to his hypothesis that ego identity has a strong nexus with various behavioral dimensions such as cognitive performance,
endorsement of authoritarian values, the establishment and maintenance of levels of aspiration. Furthermore, these findings lend at least tacit support for Erikson’s position that occupation, religion and politics are crucial issues in the life of the adolescent. This is particularly important since it is more likely for an event to be identity related at its termination if it were significant at the onset. Since this is a study of occupational identity during retirement, Marcia’s early findings are indeed supportive of this position.

III. Further Validation Studies

Marcia’s original study has prompted numerous attempts at replication and re-assessment of his original conclusions. In addition, attempts have been made to extend the evaluation to include a number of other variables, e.g., moral development, cognitive functioning, and autonomy.

Marcia attempted (1967) to replicate and validate his original study, using two measures examined previously, the CAT and a level of aspiration index, and one new variable, an anxiety measure. The extreme variability of scores and the overall demeanor of the moratoriums, in the initial study, led Marcia to hypothesize that this group of subjects were highly anxious individuals, particularly when discussing occupational and ideological concerns. To further validate the moratorium status, a measure of anxiety was included in this study.

The results replicated those determined earlier for the CAT and level of aspiration, and, as predicted, also found that moratorium individuals were significantly more anxious than members of any of the other statuses. Marcia interpreted these findings as providing
additional support for the moratorium status as a separate status, since, by definition, these individuals are unsettled by their inability to construct a life's course for themselves.

IV. Studies examining interpersonal characteristics

Other researchers have essentially revealed additional information regarding the personality characteristic associated with Marcia's ego identity statuses. The topic areas which have received the most attention include: authoritarianism, cognitive functioning, self esteem, autonomy, moral development, and college performance. A brief review of some of these areas is presented here. The reader should be directed to Marcia's chapter in Adelson's (1980) Handbook of Adolescent Psychology for a more complete treatment of these and other areas.

For the most part, in identity related research examining cognitive functioning, self esteem, autonomy and moral development, the results have indicated that subjects scoring high on the identity dimension have also scored in the positive direction on each of these dimensions. For example, Waterman and Waterman (1974) examining cognitive functioning found that achieved and moratoriums, the high identity group, were characterized by reflectivity, while the diffuse and foreclosed were more likely to be impulsive in problem solving tasks. Marcia (1976) found that identity status individuals had higher levels of self esteem, than did low identity statuses, in that they were less likely to change self evaluations in the presence of negative feedback. The reader should also be aware that research in adolescent identity development had for the most part, received little attention outside these topic areas, certainly additional research will broaden the bases of experience
to include other related areas.

**Authoritarianism** - In the area of authoritarianism, Breuer (1973), Matteson (1974), and Podd (1972) have found that foreclosures are significantly more likely to endorse authoritarian ideals than any of the other statuses. Podd (1972), examining the extent to which foreclosures would endorse authoritarian values, used a Milgram obedience task and informed subjects that they have administered maximum levels of shock to the victim. Foreclosures were significantly more likely to express a willingness to re-administer the shock, and, as a point of emphasis, illustrating the extent to which foreclosures endorse authoritarian values, all of the foreclosures in Podd's study were willing to do the experiment again.

**Cooperation** - Podd, Marcia, and Rubin (1970) used the Prisoner Dilemma Game to assess two additional dimensions: level of cooperativeness and rebelliousness. They concluded that moratoriums showed both higher levels of "rebelling" and "need for supervision", reflecting their conflict between accepting authority when needed, and trying to establish their own identity. Podd, et. al., also interpreted the longer response latency observed in the moratoriums to indicate higher levels of anxiety for moratoriums.

**College performance** - In two studies which did not examine specific task variables associated with ego identity development, Waterman and Waterman (1972, 1974) have attempted to assess the relationship of another behavioral dimension, stability of career choice, and identity development in college youth. Since moratoriums have been found to be more variable and unstable, it was predicted that moratoriums would be
significantly more likely to switch majors, or drop out of school entirely, than would individuals in the high identity statuses (achieved and foreclosed). Additionally, in as much as diffusions lack a strong occupational commitment, Waterman and Waterman expected them to show patterns similar to those predicted for moratoriums. Subjects were interviewed at the beginning of the freshmen year and again at the onset of the sophomore year. Evaluation of the findings for those individuals remaining in school, confirmed the belief that moratoriums are more likely to switch major fields. In fact, 80% of the moratoriums switched majors compared with less than 30% for those members of other statuses. Results did not confirm the second hypothesis. Instead, diffuse individuals were significantly less likely than moratoriums to switch majors. Waterman and Waterman interpreted these results to mean that a lack of commitment was of far less concern for the diffuse population than it was for the moratoriums. Without an omnipresent crisis and accompanying feeling of anxiety, the diffused individuals showed no movement from one major to another. For them there was no need to change directions when one was not sure of the direction to go.

Waterman and Waterman (1974) attempted a longitudinal examination of the data just described. Of those original freshmen students (Waterman and Waterman, 1972) and who were at the time of the study seniors, Marcia's interview was again given and evaluated. The authors predicted that identity achievers would be the most stable, and the most resistant to changes in status. Moratoriums would be the least stable. Waterman and Waterman reported that dropouts were
more likely to have been in the moratorium status. They also concluded that the number of moratoriums had decreased significantly, and there was a significant increase in the number of achievers in the ideology portion of the interview. In terms of stability, achievers were more stable than moratoriums (for both occupation and ideology), and more stable than foreclosures for ideology. Moratoriums were also less stable than foreclosures for occupation and less stable than diffusions for ideology. For the most part, these results support Marcia's contention that the achievement of an identity offers stability, that moratorium individuals are restless and unsatisfied with their current state of affairs, and are attempting to find new alternatives. Waterman and Waterman's finding that moratoriums are also more unstable than diffusions suggest that moratoriums are more concerned in their lack of commitment. This finding is also supportive of Marcia's original research.

In light of the above study, one important methodological issue must be noted. In a significant departure from the traditional scoring method, Waterman and Waterman scored and evaluated occupation and ideology as separate components of identity. They concluded that information was being lost when determination of identity status was based on a combined evaluation of occupation and ideology. To support their contention, they reported divergent growth curves (or resolution periods) for occupation and ideology. For most of the subjects, occupation was more salient than ideology and not until occupation had been successfully dealt with, was attention focused on ideological concerns. Their results indicated support for this analysis.
and several studies conducted henceforth have adopted this type of analysis. The trend is important for this study, in that, separate analyses for the occupational ideological will also be attempted.

v. Sex differences

In an effort to specifically address differences between men and women in the development of ego identity, Marcia and Friedman (1970), using Marcia's original interview as a base, added questions pertaining to attitudes toward premarital sex. They reasoned that Erikson's description that "womanhood arrives when attractiveness and experience have succeeded in selecting what is to be admitted to the welcome of inner space for keeps" (Erikson, 1968), was best addressed by assessing attitudes toward premarital sex.

The task variables they selected reflected their interest in maintaining those variables which had differentiated between statuses for the males; self-esteem, authoritarianism, and anxiety. Measures assessing level of cognitive flexibility (Luchins water jar problem) and commitment to educational advancements (measured by difficulty of college major) were also chosen in an effort to expand existing knowledge.

The results demonstrated at least partial support for Marcia's expectations, as several differences between the statuses were observed. Identity achievers did score high in self-esteem, although they scored lower than foreclosures. Identity achievers also chose more difficult college majors. Foreclosures were highest on self-esteem and authoritarianism, and lowest on anxiety. No other significant
differences were observed.

At least some studies have indicated an area of difference between males and females on the identity issue. In several of the studies using women as subjects, a different ordering of the statues was observed.

For males, individuals in the high crisis statuses (achievement and moratorium) had been found to produce very similar responses on the various dimensions. These results were interpreted to mean that crisis is an extremely salient issue for males. Marcia and Friedman (1970) and others, have tentatively reported a different ordering pattern for females, for which establishing an identity (commitment) is the more salient issue. What this means is that achieved and foreclosed women make similar responses on the behavioral indices while the diffused and moratoriums, the low commitment statuses, make similar responses on these same behavioral dimensions.

Marcia has offered several possible explanations for these findings: 1) high identity scores for foreclosures were the result of a high need for approval; 2) the women were not truthful in reporting their answers; 3) the foreclosure status is more adaptive for females. Marcia personally believed that the third explanation was the most accurate. He concluded that there may be more social support for females to adopt traditional roles than for breaking away from them and establishing an identity. Although tentative, these results force consideration of the possibility that identity might mean different things for males than it does for females.

Schenkel and Marcia (1972) established support for considering
attitudes toward sex as a factor in determining female identity.
Women were examined both on the standard interview and an interview assessing sexual attitudes. Their findings showed that for females, the sex interview differentiated between the statuses more effectively than did any portion of the standard interview.

Waterman and Nevid (1976) have also found support for the sexual attitude portion of the Marcia interview. They observed that females were more likely to have experienced a crisis and made a commitment in the area of sex than were males. Males were more likely to be foreclosed on sex and focusing on occupational concerns. However, not all researchers have found the sex portion of the interview to differentiate effectively between the sexes. This issue is largely unsettled.

At least two other researchers have attempted to expand the realm of variables examined using women as subjects.

Schenkel (1975) observed differences on field dependence-field independence and discovered that achieved individuals scored highest on this measure and diffusion scored the lowest.

Toder and Marcia (1973) examined conformity (using Asch's paradigm) and found that achieved and foreclosed conformed less than did moratoriums and diffusions.

Munro and Adams (1969) interviewed 57 college age working men and women and observed that working individuals were more likely to have achieved an occupational identity and that more college students were likely to be members of the moratorium or diffusion categories. They did not, however, find any significant sex differences.
Orlofsky (1973) examined sex typing and identity development and observed that individuals, either male or female, having masculine or androgynous sex roles were more likely to be achieved or foreclosed and have higher levels of self-esteem. Individuals with feminine sex roles, particularly males, were more likely to be in the moratorium or diffusion statuses. And, in general, individuals with low sex role identification were more likely to exhibit lower levels of self-esteem.

Orlofsky (1977) compared males and females on measures on achievement, fear of success, fear of failure, and self-esteem. He found that achieved and moratorium men and women were higher than foreclosed and diffused on achievement motivation and self-esteem. He concluded that, at least, on achievement and self-concept variables, males and females resemble each other more than they differ.

In a critical review, Raphael (1976) reported that at least part of the problem in comparing studies of males and females has primarily been a methodological one. Most of the research using men has been done using college freshmen as subjects. The studies examining females have typically been with older subjects, college juniors and seniors. Raphael concluded that studies in which same age subjects have been used, the paths toward identity are similar and that exploration of alternatives has similar, if not the same, meaning for both sexes.

In the final analysis, however, the research involving women is not without debate and controversy. The verdict is still out on whether sexual attitudes are an issue of more importance for females than males and whether or not the statuses are functionally equivalent.
for both sexes. There is supportive evidence for both sides, and additional research, comparing same age subjects on the separate portions of the interview, would be helpful in deciphering this problem. More concern must also be directed toward establishing the effectiveness of each status for the respective sexes. But, it is also a realistic possibility that these observed discrepancies might never be resolved. Marcia and his associates began their work in the late 1960's and early 1970's. The clinical picture for women, in terms of career goals and aspirations, is changing. It is possible those early observed differences actually existed. It is also possible that they no longer exist, as Marcia found them. It is equally likely that methodological problems, reported by Raphael, have been primarily responsible for the observed differences. Perhaps subsequent research will provide a more clear picture of the state of affairs. These thoughts are purely speculative and firm conclusions should be avoided.

One final note in this regard, Josselson (1973) examined the psychodynamic and developmental aspects of ego development in women and concluded that although the pathways to identity are remarkably similar for both sexes, there is a difference in quality for the women. Identity, for women, includes an examination of what kind of person to be, while occupational considerations are more likely to include intrinsic qualities such as job satisfaction, interpersonal relationships, rather than purely monetary and status reasons. While an equivalent study for males has not been attempted, it appears evident that one must be careful in accepting this interpretation at face value, and be aware that some differences between the sexes may exist.
VI. Extension of identity status evaluation in adulthood

A. Identity and intimacy

In recent years the identity issue has received attention beyond the adolescent years. In an effort to understand the relationship that exists between ego identity and intimacy, the next crisis period, several researchers have extended the identity research into adulthood.

Marcia (1976) did a 6-year follow-up of 30 subjects previously interviewed while college students. Using measures of identity (Marcia's interview) and intimacy, Marcia compared past and current identity with current level of intimacy. He also examined the relative stability of each of the identity statuses. Marcia observed that the high identity statuses (moratorium and achieved) were more unstable than were the low identity statuses and individuals in the high identity statuses were more likely to "move" into the lower statuses. Marcia offered the interpretation that lower identity statuses (particularly foreclosure) were more adaptive in the adult years.

Since subjects were now employed and perhaps married, the need, even the advisability, of exploring and evaluating occupational and ideological issues was now less important. It is realistic to assume that to become promoted or advanced in an occupational area, a more strict adherence to traditional values and thought patterns is essential. Dealing with identity issues might be hazardous to one's career goals and aspirations. It is also possible that for most adults there are few issues that demand serious consideration, even if they once did. In that instance a foreclosure rating would be appropriate.
Marcia also observed no significant relationship between levels of intimacy and identity. In an effort to determine if any relationship existed, Marcia examined only those individuals whose identity status had not changed in the 6-year period. In this analysis, Marcia noted that identity achieved were more likely to be in the intimate status. Those who remained foreclosed were more likely to have developed a pseudo-intimate relationship, as defined by Orlofsky. Moratoriums and diffusions exhibited no significant relationships with any intimate patterning.

Based on these results, Marcia concluded that for individuals who maintained a stable level of identity, a relationship did exist between identity and intimacy.

Marcia also concluded that at least for two of the statuses, identity achieved and foreclosures, specific levels of intimacy were observed.

Orlofsky, Marcia, and Lesser (1973) also examined this relationship in college males. The authors concluded that the high identity statuses were significantly higher in intimacy than the low statuses. They also found that achieved individuals were significantly less isolated than the diffused group, who were the most isolated of all the statuses.

Kacaguís and Adams (1979) interviewed college men and women (age 19-25) on identity and intimacy interviews and concluded that high identity status correlated with high intimacy, and achievers were significantly more advanced on intimacy measures than the other statuses. This relationship existed for both sexes.
None of the above studies indicate that a specific, quantifiable relationship exists between identity and intimacy. There does not appear to be a clear ordering effect between identity and intimacy, however, there appears to exist a significant relationship between having established an identity and obtaining more advanced (more intimate) levels of intimacy.

B. Identity in later adulthood

Waterman and Waterman (1975) examined male college students and their fathers using Marcia's identity interview. It was observed that significantly more of the fathers were foreclosures than any of the other statuses. Particularly in the areas of occupation and religion, the adults were significantly more likely to be classified as foreclosures, almost to the exclusion of the other statuses. Once again the explanation was offered that becoming foreclosed as an adult is more adaptive, or at least less anxiety producing, than actively pursuing identity issues. It is possible that the foreclosure status provides more stability in the adult years than does identity achievement. It is also conceivable that crises in political, religious and occupational areas either have occurred, do not occur, are unimportant, or are avoided. The necessity of maintaining a level of performance at work and home may be the primary focus in the adult years. It is also plausible that identity issues for adult males involve different developmental tasks than addressed by Marcia's identity status interview.

Because the examination of adulthood, in terms of identity and intimacy, is in an infant station, conclusive statements are, at best,
ill-advised. It is important to note, for the purposes of this study, that efforts have been made to extend the use of Marcia's instrument into adulthood. Some effort has been made to interpret those findings and understand the relationships that exist between adolescence and adulthood. It is also of consequence that none of these adulthood identity studies have attempted to validate the original statuses with an adult population. This information is important for any interpretation of adult identity related issues using the Marcia system of categorization, for without this information neither the researcher nor the reader can truly evaluate whether or not categorizing adult identity into Marcia's system is helpful, adequate, or even accurate. As a part of this attempt to explore the identity statuses in adulthood, the behavioral dimensions which discriminated between statuses in the adolescent sample, will be tested with the adult sample. It would be hypothesized that similar results would be found with this group as well. Eriksonian theory and Marcia's research would predict as much. Therefore, one aim of this study will be to empirically examine Marcia's statuses with an adult population.

C. Identity in later adulthood

The examination of adult identity issues has not received the attention given to adolescent identity. The number of empirical studies, with adults and the aged as subjects, has only showed a significant increase into the 1970's. Therefore the number of areas that could be addressed in such a short time is limited. Furthermore, "identity" during adulthood does not have the theoretical background to generate empirical research.
As cited previously, (Marcia, 1976; Waterman and Waterman, 1977) empirically examined identity in adulthood, but neither of those studies have addressed issues distinctively pertaining to adult identity.

Although not specifically discussing identity, Richard Kalish has addressed conditions and events existing in the lives of both the adolescent and the aging adult which are identity related. Briefly stated, the similarities are: 1) both live in age-segregated societies; 2) both are reminded of their non-productive role in society; 3) neither have an effect upon the decision making apparatus; 4) both exist in an unstructured time frame; 5) both are felt to be inadequately educated; 6) both are poor.

The extent to which these evaluations reflect the veridical state of events for every adult or adolescent has not been ascertained. They are more accurate for some than others, and while all of the parallels are not directly related to identity during adulthood, one can hardly ignore the issues of change or transition faced by aging adults and the retiree. These areas of transition are definitely the material from which identity is made.

Whitbourne and Weinstock (1979) have made a direct attempt to assess specific adult identity issues in adulthood and have incorporated Marcia's strategy into their analysis. They have described each status in terms of its balance between preserving a coherent identity (deductive reasoning) and allowing experiences to dictate change in identity (inductive reasoning). An achieved individual maintains a stable balance between the two mechanisms, preserving the current
and adapting to the new. This is, essentially, a realistic view of the self, open to feedback. The moratorium shifts from balance to imbalance, receiving and evaluating from both processes, unable to determine whether or not the new information should alter the existing identity. There is no stable identity. The foreclosure prefers deductive evaluation, denying experiences which challenge the current identity. Diffusions use little deductive differentiation, nor are they directed toward finding an identity.

Drawing from Whitbourne and Weinstock's descriptions of the identity statuses, Amstey and Whitbourne (in preparation) have attempted to identify those areas or issues that serve as stimuli for inductive and deductive differentiation in adulthood, in other words, provide the content for the process of identity change. Although they concluded that almost any event may cause disequilibrium if perceived as discrepant from expectations, they identified 6 content areas which they felt to be most likely to produce changes in identity: 1) goals; 2) sex roles; 3) self-concept; 4) work-related attitudes; 5) religion; 6) politics.

Using a multiple choice format, Amstey and Whitbourne classified adult women, homemakers or continuing education students, into identity statuses based upon responses to questions sampling from each of the content areas.

Their results indicated that the greatest percentage of subjects were achievers. The authors also reported a greater number of foreclosures among the homemakers and significantly more moratoriums among the continuing education subjects. Amstey and Whitbourne interpreted these
results as providing support for the effect of transition on producing changes in adult identity. A decision to return to college was correlated with higher levels of uncertainty about who one is. Those who had not enrolled did not experience this uncertainty. They were not in transition. They were not experiencing an identity crisis. The authors also noted that significant activity in one or more of the specific content areas was influential enough to produce change in identity status.

Further extending their model, Whitbourne and Weinstock (1979) have identified 6 contextual areas (and corresponding events) which may trigger a transition period for the identity.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-concept</td>
<td>1. Change in physical appearance, skills, or treatment by others</td>
</tr>
<tr>
<td>2. Personal goals</td>
<td>2. Success or failure in major endeavor</td>
</tr>
<tr>
<td>3. Values</td>
<td>3. Confirmation or rejection or major beliefs by significant others</td>
</tr>
<tr>
<td>4. Motives</td>
<td>4. Approval or denial of behavior</td>
</tr>
<tr>
<td>5. Interpersonal relationships</td>
<td>5. Formation or breaking of close ties</td>
</tr>
<tr>
<td>6. Social roles</td>
<td>6. Acquisition or loss of positions with normative expectations</td>
</tr>
<tr>
<td>7. Personal/social milieu</td>
<td>7. Natural or accidental disasters</td>
</tr>
</tbody>
</table>

The above chart is not an exhaustive one, nor is it an attempt to assign values or levels of importance for each area. Each area, and the associated event, must be given meaning by the individual
experiencing it. The authors merely indicated areas, in the aging adults life, which are most likely to change, and thus affect the identity.

Although retirement was not specifically identified above, there are several events which were described that can easily be extended to include retirement. For example, changes in skills, use of skills, and differential treatment by others often is a function of retirement. The breaking up of close ties, and the loss of significant interpersonal relations frequently occur in the retirement process as the retiree leaves the work site. It has often been mentioned, by retirees, as a disappointing part of the retirement process. The loss of position, with its normative expectations, and the realization of economic changes, resulting from decreased income, occur during retirement and must be recognized and processed by the retiree. For each event, and for each individual, there are varying degrees of discomfort and varying needs for resolution. Regardless of the level of discomfort, however, retirement signifies transition. Life no longer exists as it did. New sets of responses and attitudes are expected and may be demanded of the retiree. And with these new attitudes and behaviors, a changing identity.

The significance of Whitbourne and Weinstock's presentation lies in their identification of transition as the major factor in producing identity change during adulthood. Since they did not assign a level of importance to all of the possible variables that could produce change, they have avoided the impossible task of defining the meaning of an event for each person. By identifying transition, as they have
done, they have described a framework by which to evaluate and interpret events in the adults life that are capable of producing identity change. This is important in the context of this study, in that it provides a theoretical and empirical basis to fulfill one of the major goals of this project, that of assessing the identity status of an adult population. Whitbourne and Weinstock have provided a significant background to warrant an investigation of this type. Although the act of retirement, as well as a number of personality variables related to retirement, have been researched and documented, the relationship of identity, in particular, identity status, to retirement has been basically ignored. Therefore, a specific aim of this project is to understand more clearly the effect of retirement upon the identity of the retiree. Additionally, a comparison between adolescents and adults with respect to the various components of identity, (overall, occupational and ideological identities) will be made. This will be an attempt to assess whether change in identity is a function of factors such as developmental tasks, cohort, or age. If the adolescent and adult samples exhibit different distributions on the identity components this would be an important finding allowing for an analysis change in identity over time.

As a research topic, retirement does not have particularly long history, primarily because it is a relatively new institution in American life. Only since social security has retirement become a viable option for most Americans. And until recently, its effect upon the individual has been greatly misunderstood.
For many years retirement was described as having a traumatic effect on the social and psychological well-being of those individuals experiencing it. These assumptions were primarily based upon the idea that occupation was the central focus of a person's life. It provided them with status, income, opportunity for establishing friendship ties, and a role to play in society (Simpson, Back, and McKinney, 1966; Maddox, 1966). Retirement signalled the time when an individual was no longer able to perform these functions. It was therefore seen as a very degrading experience (Miller, 1965). In addition, retirement was perceived to be traumatic in that there were no roles to play during retirement. No one expected anything of a retiree, therefore there were no behavioral or emotional requirements of the retiree. This roleless role was determined to be devastating for the man who had worked, who had maintained a role, his entire life. The evidence which supports this position may be classified into 3 areas: a) the importance of the work role for older workers; b) the prevalence of negative stereotypes; and c) the impact of societal influences.

The importance of the work role for the older adult can be thought of in 3 distinct areas: a) attachment to work; b) job satisfaction; c) work following retirement. Riley and Foner (1968) have found that older workers are more attached to their jobs than are younger employees, and are much more likely to report higher levels of job satisfaction. Older workers are more likely to express a desire to continue to work following retirement, even when it is not financially necessary to do so. Therefore, the prospect of leaving a job may be traumatic for many pre-retirees.
The prevalence of negative stereotypes also contributes to negative feelings about retirement. For many adults retirement means that one is now "old". The only major life event remaining is death. In addition, many older workers report that employers often believe that they cannot perform as well as a younger employee. Despite the fact that safety records reveal otherwise, the older worker is often viewed as a potential safety risk, particularly in jobs where physical skills are required. Palmore (1975) found that often the lack of training in operating new machinery contributed to these feelings. Even when employees have attempted to retrain older workers, often the traditional training and retraining have been used. These methods usually are not as effective with older workers. The ineffectiveness of these attempts has led to more negative feelings toward the elderly worker. The worker, while perhaps not all that disappointed about retirement per se, feels poorly about the negative attitudes directed toward him by his employer and his fellow workers. And with pension plans, social security and early retirement inducements, offered by many companies, often the retirement age individual finds it nearly impossible to turn down retirement. Financially, it would be unadvisable.

These data have provided some researchers with evidence to support the contention that for many individuals the act of retiring is a negative experience.

In recent years, however, this picture has been, to a large extent, reevaluated and replaced with a more optimistic one. It is generally recognized that for many individuals the impact of retirement is not only
relatively benign but often is anticipated. In an examination of retirement, several attitudes related to retirement have emerged.

Atchley (1976) reported that most individuals perceive retirement to be "active, busy, hopeful, meaningful, mobile, and independent."

He also indicated a sharp increase in the number of voluntary and early retirements since the early 1950's, suggesting a more positive attitude toward retirement. Anticipated financial problems and concerns regarding health are the major sources of negative attitudes toward retirement, and studies have indicated that if those fears can be alleviated, retirement is often seen as an intriguing option (Atchley, 1976). Positive attitudes toward retirement are likely to be related to financial outlook, number of social relationships, social activities, preparation for retirement, and self-rated health. Generally speaking, the better the financial picture, the greater the number of social relationships and activities, and the more extensive the preparation, the more positive the attitude toward retirement.

Although the adjustment to retirement is traumatic for some, most individuals are satisfied after they retire. Some studies have indicated higher levels of life satisfaction in workers than retirees, but in those studies neither health or income-related issues were examined. A study by Palmore and Luikart (1975) has revealed, in fact, that self-rated health was the most important contributor to life satisfaction. Satisfying social relationships and adequate sexual fulfillment have also been found to be related to life satisfaction although not nearly as important as self-rated health. In fact, adequate adjustment or attitude toward retirement appear to have
little relationship to overall rating of life satisfaction. It is possible that dissatisfaction with retirement was not related to retirement, per se, but to those problem areas. Streib and Schneider (1971) found no significant decrease in life satisfaction after retirement, although many reported that they were not completely satisfied, citing financial and health reasons as major contributors to their dissatisfaction.

In a National Council of Aging (1975) survey, few retirees (10%) reported that they missed the work itself. Loss of income, loss of associations at work, and decreased activity level were seen as more dissatisfying than the loss of work. Feelings of dissatisfaction were more prevalent among those who had not wanted to retire than for those who had anticipated its coming. Those willing to retire show higher level of life satisfaction (Simpson, Back, and McKinney, 1966). Many of those retirees, willing and unwilling, report a certain enjoyment surrounding retirement. More time for leisure, freedom from tensions of the job, and doing what one desires were cited as positive factors of retirement. In addition, positive attitude toward retirement has been found to be related to variables such as occupation, education and income level. Shepphard (1976) and Atchley (1976) have discovered that the higher the education, income and occupational level the more favorable the attitude toward retirement and the more positive the adjustment in retirement. These positive attitudes are often attributed to the prevalence of options following retirement. The higher the income the greater the ability to travel, visit family, and maintain other ties, such as clubs and private associations. The higher the
occupational and educational level, the greater likelihood of continuing to work in some capacity, often with the same company. In fact, there is increasing reluctance in many companies to lose the highly skilled technicians as replacement is often more costly. Among the middle and lower status individuals the opportunities are less available. This does not necessarily mean that the adjustment to retirement will be negative, although it increases its likelihood greatly. A third research interest of this study will be to examine the relationship of occupational and educational levels to both identity during retirement and life satisfaction. If occupational and educational levels are significantly related to positive adjustment to retirement, then it would follow that a positive adjustment to retirement would be related to identity status as well, with those individuals who have higher occupational and educational levels being more likely to have achieved an identity during retirement. It would also seem likely that individuals who have achieved an identity would have higher levels of life satisfaction. These relationships will be tested in this study.

The picture of retirement as an event, as a crisis, is not well supported in the literature. For those individuals who perceive retirement income to be adequate, who maintain contact with friends (and most do), have relatively good health, whose families are supportive, and who maintain a moderate level of activity, retirement is a positive life event. For those individuals who find themselves lacking in the above mentioned areas, the transition to retirement will usually not be as successful nor as satisfying. However, the research does not indicate that retirement, even for the less well prepared,
will be traumatic or dissatisfying for most elderly adults.

In summary, although perceptions of retirement as a devastating crisis period are probably inaccurate, most writers indicate that retirement is an important transition between full time, less than full time, or no employment. There are new roles, attitudes, and behaviors to be learned and new identities to be discovered. Viewing retirement as a time for assessing and re-evaluating one's identity, rather than a devastating crisis, is in keeping with the current research on retirement.

In summary, the intentions of this study are: First, to assess the identity status of adult males during retirement, using Marcia's system of categorization. Also, this study will attempt to compare the adolescent and adult sample on the various components of identity: overall, occupational and ideological, in an attempt to assess the nature of identity change. Second, to validate Marcia's identity statuses with an adult population using the behavioral dimensions which discriminate between the statuses in an adolescent population. It is hypothesized that: Pre-retirees will be classifiable into identity statuses. These statuses will be differentiated by their performance on the two task variables: a) identity achieved individuals will score higher on the concept attainment task than any of the other statuses, and b) foreclosed individuals will endorse authoritarian values to a greater extent than will the members of the remaining statuses. Third, to assess a number of subject variables, to determine their relationship to identity during retirement. These include occupational level, educational level, time until retirement,
life satisfaction. It is hypothesized that: identity achieved will report the highest levels of life satisfaction (ego integrity). Since they are more able to see themselves as retirees, as fitting into the role of a retiree, they will more likely feel a continuous relationship with the past and more satisfied with what the future holds; and the subject variables will show these relationships with identity status: a) subjects with less time on the job (1 year or less) until retirement, will be more likely to have spent time thinking and planning about their retirement. They will be more likely to have achieved or foreclosed upon an identity about retirement. Subjects with more time until retirement (1 year or greater) will be less likely to have specific plans regarding retirement, since its onset is not imminent. Their feelings will be more vague and uncertain. These individuals will be more likely to be in the moratorium or diffusion categories; and b) individuals in the professional positions (because of higher intrinsic interest in their jobs) and those individuals in the lower occupational positions (because of financial concerns) will be more likely to express real concerns and regrets about retirement. They will be more likely to be in the moratorium and diffusion statuses, finding it more difficult to really look forward to retirement. These hypotheses will be particularly examined for overall identity and identity during retirement. Since to adjustment to retirement in reflected in these ratings their relationship to these task variables is of special interest for this study.
CHAPTER III

METHOD

SUBJECTS

Adult males - Sixty adult males, ages 61-69, who were within 2-3 years of retirement, participated as the adult male sample in this experiment. Potential subjects were identified to experimenter in one of four ways: a) an initial contact letter (see appendix) was mailed to various employers, union officials, and ministers in the greater Kansas City, Missouri area, explaining the nature of the study and requesting their help in locating men who would be retiring within the next 2-3 years; b) local ministers of the Church of the Nazarene were telephoned and requested to help identify members of their congregation who were retiring. The college where the experimenter serves as a faculty member is affiliated with the Church of the Nazarene; c) adult members of the John Knox Presbyterian Church were approached and asked to identify co-workers who might be retiring within the next 2-3 years, and; d) each interviewee, upon the completion of the interview, was asked to identify co-workers who were also contemplating retirement.

Each potential subject was contacted by telephone and informed that his name had been given to the experimenter by ____________ (persons' name) as someone who might be retiring. The nature of the study was described and a petition was made for a face to face interview, in their home or office, at a mutually agreeable time.
Of the individuals contacted, 81% of those who were eligible (in that they met age and retirement requirements) agreed to the interview. Upon completion of the interview, any questions that the subjects had were answered, a rationale for the study was provided, and each one was thanked for their participation. Subjects were also informed that if they desired, a summary of the results would be mailed to them at the completion of the study.

Adolescent males - Sixty three male college freshmen served as the adolescent sample in this study. All subjects were enrolled in introductory psychology classes at Mid-America Nazarene College or The Ohio State University. Participation in the study fulfilled a requirement necessary for successfully completing the course. Subjects enrolled at Mid-America Nazarene College, who were interviewed in the Fall semester, 1980, were assigned a time to be interviewed. The interviews were conducted in the experimenter's office on the Mid-America Nazarene College campus. Subjects at The Ohio State University were interviewed in the Spring quarter, 1981. These subjects selected an interview time convenient for them. Interviews were conducted in an experiment room located in Arps Hall on the Columbus campus of The Ohio State University.

INSTRUMENTS

Identity status interview (independent variable) - Adult subjects were assigned a current identity status based on the answers given to a 20–40 minute semi-structured interview developed by Marcia (1966), and modified by the author (see appendix C ) for this study. Each individual was evaluated for the presence of crisis and/or commitment
in each of three content areas, religion, politics, and occupation (or retirement related identity. On the basis of this interview subjects were assigned to one of four identity statuses: identity achieved, foreclosed, moratorium, or identity diffused. If the subject had experienced a crisis and made a commitment he was assigned the status of identity achieved. If commitment had been made in lieu of a crisis, then a foreclosure status was assigned. Subjects currently embroiled in crisis but who had not yet committed were identified as moratoriums. Diffused subjects had neither experienced a crisis, nor made a commitment. For analysis purposes, occupational identity (identity during retirement), ideological identity (which was assessed by combining the ratings for religions and politics), and an overall identity (all three areas combined) was assessed. For the most part, for ideological and overall identity, where combinations of ratings were used, the raters "summed" across the individual components to reach a final rating. If, for example, a subject had an achieved rating for occupation and religion, and a moratorium rating for politics then an achieved rating would most likely be assigned. For cases where two or three different ratings were observed, the rater either labeled the section unscorable, or established a rating based on the individual ratings and an overall feeling about the subject based on the actual interview. For example, if a subject had a moratorium rating for politics and an achieved rating for religion and the rater felt that for this subject religion was the more important, the more salient dimension, then an achieved rating might be given for this person. Marica also used this approach in his original research. For the most part,
however, a numerical average between the statuses was used in assigning an individual to an overall status rating.

For each of the four content areas, subjects were asked to identify their plans or feelings, how they came to choose those plans, and to identify their parents, spouses or friends' feelings about the matter. For example, in the religion section, subjects were asked about their religious affiliation, if any, and if they were currently active in a church. They were also asked about their parents' beliefs and asked to assess if their beliefs differed from their parents. This portion of the interview attempted to determine if an individual had a commitment to any religious beliefs and whether or not those beliefs differed from their parents. Subjects were also asked about their past and/or present religious doubts. Assessment of a religious crisis was made with this information. Although the questions differed slightly for each area, the focus and intent remained the same. For analysis of current identity status, the section of the interview dealing with occupational choice was modified to include questions pertaining to the act of retirement rather than occupational choice. The other sections of the interview were modified only slightly to reflect an adult perspective. To determine identity status as an adolescent, adult males were also queried about their job history and the events surrounding occupational choice as an adolescent. This portion of the interview was taken from the occupation section of Marcia's semi-structured interview (see Appendix B).

Adolescent males were assigned a current identity status based on the answers given to Marcia's original 15-30 minute semi-structured
identity interview (see Appendix B).

**Measure of task variables (dependent variables)**

**Authoritarianism and submission** - Stems from the authoritarian and submission subscales of the California F scale (Adorno, et. al., 1950) were used to measure an individual's willingness to endorse authoritarian attitudes and values. This scale was used previously in Marcia (1967) to validate differences between the identity statuses. It served a similar purpose in this study.

**Stressful concept attainment task** - The concept attainment task (CAT) was developed by Bruner, Goodnow, and Austin (1956) and later modified by Werck (1961) (see appendix H). This requires the subject to acquire a concept, known to the experimenter, by successfully eliminating irrelevant information. Each individual is shown a large chart of 32 boxes. The boxes each contain objects possessing five dichotomous characteristics: size (large or small), color (black or white), position (right or left), quantity (one or two), and shape (square or circle). For each problem, the experimenter chose either 1, 2, or 3 characteristics from the 5 possible. At the onset of each trial, the experimenter identified for the subject, one of the cards from the chart which contains all of the characteristics chosen for that trial. Subjects may adopt one of two strategies to learn the selected characteristics. They may either randomly guess until they have identified the characteristic(s) correctly, or they may successfully eliminate unnecessary characteristics by identifying other boxes which also contain the selected characteristics and comparing
them to other identified boxes for their similarities. Since no two boxes were identical this approach allowed the individual to systematically discard those characteristics that were not a part of the concept. Subjects were scored in three areas: 1) the amount of time to attain the concept; 2) the number of requests to identify boxes with similar characteristics; 3) the number of incorrect guesses. The longer the latency to correctly identify the characteristics, the greater the number of requests, and the greater the number of incorrect guesses, the higher the score. Subjects were instructed to strive for the lowest score they could. A stressful condition was added to this task by informing each subject that the CAT was one of the single best predictors of intelligence and mental functioning in adulthood. The experimenter mentioned to each subject that they would, of course, want to do their best (see appendix for a more complete description of the instructions). Upon completion of the task, subjects were informed that there was actually no relationship between intelligence and performance on the CAT.

**WAIS vocabulary** - The vocabulary section of the WAIS was used to provide a simple estimate of intelligence. Poor performance on the CAT, particularly among those less educated subjects, led the experimenter to hypothesize that ability to perform well on the CAT may be more related with intellectual functioning than conceptual ability. To examine this relationship, the vocabulary section of the WAIS was used.

**Life satisfaction** - Adams' (1969) modification of Neugarten, Havighurst, and Tobins' (1963) Life Satisfaction Index - A was used to assess general level of life satisfaction. This measure was used to
approximate a level of ego integrity (versus despair) in the adult population.

**Subject variables** - During the course of the interview, data were also taken on the following subject variables: age, time until retirement, current occupation, whether retirement was forced or voluntary, and educational level. Previous work in adulthood (Schneider, 1966; Ward, 1980) have found that subjects who differ on these variables also show significant differences in attitudes and adjustment to retirement. Data were collected to evaluate the relationship of these variables to identity status during retirement.

**PROCEDURE**

Adult subjects were interviewed in their own home or office. Each subject was informed that the experimenter was interested in the thoughts and feelings about retirement and had some questions to ask him about his view of retirement. Each subject was also informed that: "I have a tape recorder and would like to record our conversation. Anything that we do or say is confidential; no names will be used. I only use this recorder to ensure complete accuracy in recording your responses."

At the completion of the interview subjects were presented with the authoritarian scale. The scale is titled "Value Profile". Subjects were told: "I have a profile for you to fill out. The directions are at the top of the page, if you have any questions, I will try to answer them."

Following the completion of the value profile each subject was presented with the Life Satisfaction Index with the instructions:
"Here is another profile, please read the directions. I will try to answer any questions you may have."

Subjects were then administered the WAIS vocabulary test. Subjects were instructed, "I have a list of words that I would like for you to define. After I read each word to you, define it as best you can."

The CAT was the last task administered. Subjects were informed that the CAT was a measure of intellectual performance and it was expected that they would do their best. (Complete instructions can be found in Appendix I). Upon completion of this task subjects were informed that, in reality, the CAT was not a measure of intelligence and each subject was reassured that he had performed as well as he could.

Adolescent males were informed that "I have a few questions to ask you about occupation, religion and politics." There are no right or wrong answers, I'm only interested in what you think and feel."

Both the adolescent and adult samples were informed that they could discontinue the experiment at any time.

Subjects were thanked for their participation.
CHAPTER IV

RESULTS

I. Preliminary Analyses

A. Inter-rater reliability (adults)

Prior to the main analysis of identity during retirement, an analysis of inter-rater reliability was determined.

Each adult interview was evaluated, separately, by two trained raters for the presence of crisis and/or commitment in each of four content areas; occupation (identity during retirement), politics, religion, and a retrospective review of identity during adolescence. Each rater also assigned each subject to an overall status. Usually the overall rating was a sum of the ratings for the individual statuses. However, if a rater had a reason to deviate from using an arithmetic sum and assign a different rating, this was permissible. For a more complete description of this procedure the reader should see page 48.

The raters were: a) this experimenter; b) a recent B.A. graduate with a degree in psychology; c) an instructor of psychology at Mid-America Nazarene College.

The rating for each status had to receive unanimity of both raters to reach criteria. Those portions of the interview for which the two major raters disagreed were submitted to a third trained rater. In those instances, agreement by 2 of the 3 raters was necessary for final designation. Those portions of the interview which did not reach this criteria were ruled unscorable and subsequently excluded from the
Percentage of agreement was assessed on two levels, item by item and overall agreement. These data are contained in Table 1. Overall percentage of agreement was 72%. This is within the generally accepted criteria for this type of rating (see Marcia, 1976). It should be noted that raters 1 and 2 had an agreement rate of 80.8%. This is quite good considering the large numbers of judgments that were made.

<table>
<thead>
<tr>
<th>Judges</th>
<th>Percent of agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 with 2</td>
<td>80.8%</td>
</tr>
<tr>
<td>1 with 3</td>
<td>57.5%</td>
</tr>
<tr>
<td>2 with 3</td>
<td>12.0%</td>
</tr>
<tr>
<td>Overall</td>
<td>72%</td>
</tr>
</tbody>
</table>

2. Inter-rater reliability (adolescents)

Each adolescent interview was evaluated as per the criteria outlined above, with one exception, there was no retrospective data to be evaluated.

Percentage of agreement was assessed on two levels, item by item and overall agreement. These data are contained in Table 2. Overall percentage of agreement was 75%. The primary raters achieved an agreement rate of 84.1%.
TABLE 2
Percentage of agreement on
Adolescent Identity Status Interviews

<table>
<thead>
<tr>
<th>Judges</th>
<th>Percentage of agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 with 2</td>
<td>84.1%</td>
</tr>
<tr>
<td>1 with 3</td>
<td>55.3%</td>
</tr>
<tr>
<td>2 with 3</td>
<td>34%</td>
</tr>
<tr>
<td>Overall per cent of agreement</td>
<td>75%</td>
</tr>
</tbody>
</table>

3. Inter-rater reliability (combined)

Table 3 contains the percentage of agreement for both the adolescent and adult samples. Overall percentage of agreement was 73.4%.

TABLE 3
Percentage of agreement on
Identity Status Interviews (combined)

<table>
<thead>
<tr>
<th>Judges</th>
<th>Percentage of agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 with 2</td>
<td>82.4%</td>
</tr>
<tr>
<td>1 with 3</td>
<td>56.3%</td>
</tr>
<tr>
<td>2 with 3</td>
<td>34%</td>
</tr>
<tr>
<td>Overall per cent of agreement</td>
<td>73.4%</td>
</tr>
</tbody>
</table>
II. Primary Analyses

Sixty adult males, who were within 3 years of retirement, were interviewed in their own home or office. Of those, data from 57 were subjected to the analyses below. Of the three who were eliminated from analysis, 2 were eliminated because of equipment failure. The third subject had retired between the initial contact and subsequent interview. The reader should be aware that since some subjects responses were unscorable, or they did not complete all of the task variables, the 'n' for these analyses are not the same. The 'n' used for each analysis reflects the number of subjects available for that analysis.

A. Analysis of identity statuses

It is important to note that one goal of this study was to categorize the adult population into the various identity statuses as developed and described by Marcia (1966). Therefore, primarily as a descriptive technique, three separate chi square analyses were used to present the distribution of subjects among the four identity statuses, identity achieved, foreclosed, moratorium, and identity diffused. The reader should be aware that these chi square analyses are for descriptive purposes only. The components which are being evaluated, crisis and commitment, are not independent but are actually two related attributes of identity. This violates a basic premise of the chi square statistic. Therefore, with that in mind these data are presented. Separate chi square analyses were tabulated for overall identity status, occupational identity (hereafter, retirement related identity) and ideological identity status.
1. Overall identity status

Results of the chi square distribution for overall identity status are contained in Table 4. The results indicate the presence of a significant chi square statistic \( \chi^2 = 30.23, df = 1, p < .001 \) for overall identity. These results are significantly different than would be predicted by chance.

<table>
<thead>
<tr>
<th>Crisis</th>
<th>Commitment</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Identity achieved</td>
<td>44</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(80.0%)</td>
<td>(5.5%)</td>
<td></td>
</tr>
<tr>
<td>Moratorium</td>
<td>Identity Diffused</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>(1.8%)</td>
<td>(12.7%)</td>
<td></td>
</tr>
</tbody>
</table>

\[
\chi^2 = 30.23 \\
p < .001
\]

A perusal of this table reveals that the identity achieved category contains more respondents than any of the other identity status categories. Eighty per cent of the total sample are contained
in this status. This is a substantially greater number than any of
the other statuses. Strictly by chance these results would not be
expected.

2. Retirement related identity

Results of the chi square for retirement related identity are
contained in Table 5. These results indicate a non-significant chi
square statistic ($X^2 = 1.16$, df = 1, p = .28).

This represents a sharp departure from the results observed for
overall identity status. A greater percentage of this distribution
(41.5 versus 1.8%) are in the moratorium status, and fewer respondents
(38.17% versus 80%) are in the achieved category. In fact, nearly
equivalent numbers of respondents are in the moratorium and achieved
categories. Results indicate substantially more achieved, than
foreclosed and diffused, and more moratoriums than foreclosed and
diffused. The foreclosed and diffused statuses remained unchanged.

TABLE 5
Chi Square of Identity Status
for Retirement Related Identity

<table>
<thead>
<tr>
<th>Commitment</th>
<th>Crisis</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identity achieved</td>
<td>Foreclosed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(39.6%)</td>
<td>(5.6%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>Moratorium</td>
<td>Identity Diffused</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$X^2 = 1.16$

$p = .28$
3. Ideological Identity status

Results of the chi square distribution for ideological identity status are contained in Table 6. The results indicate a significant chi square statistic ($X^2 = 33.53$, df = 1, $p < .001$).

As was observed in the distribution for overall identity status, the greatest percentage of the respondents are in the achieved category. Of the total sample, 82.9% are in this category. None of the respondents were classified as moratorium on political and religious issues. In addition, only 17% of the sample (8 respondents) are contained in the foreclosed and diffused categories.

TABLE 6
Chi Square of Identity Status for Ideological Rating

<table>
<thead>
<tr>
<th>Crisis</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td>Identity achieved</td>
<td>Foreclosed</td>
</tr>
<tr>
<td>Yes</td>
<td>39</td>
<td>2</td>
</tr>
<tr>
<td>(82.9%)</td>
<td>(4.3%)</td>
<td></td>
</tr>
<tr>
<td>Moratorium</td>
<td>Identity Diffused</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>(0%)</td>
<td>(12.8%)</td>
</tr>
</tbody>
</table>

$x^2 = 33.53$
$p < .001$

These results reveal that the largest percentage of respondents for the overall and ideological ratings are in the achieved category.
Only for the retirement related identity rating is there a noticeable departure from these results. For that distribution, the number of subjects in the achieved and moratorium statuses are almost equal. Only 19% of the subjects are found in the foreclosed and diffused statuses for any of the analyses.

B. Analysis of the Subject Variables

A number of subject variables were examined for their relationship to identity status. They include occupational level, time until retirement, and educational level. Streib and Schneider (1965) have found that occupational level and educational level are correlated to attitude toward retirement. Generally, the higher the levels of education and occupation, the better the attitudes toward retirement. The better the attitude toward retirement, the better the adjustment to retirement. Studies have also shown that the higher the educational and occupational levels, the greater the likelihood to plan and think about retirement. Since thinking and planning for retirement are essentially necessary for an individual to achieve an identity during retirement, it was hypothesized that occupational and educational level would be related to identity status, in that, those individuals with higher levels of education and occupation would be more likely to have achieved an identity.

1. Occupational level

Three separate chi square analyses were used to present the distribution of subjects among the identity statuses and levels of occupation. The reader is cautioned to remember that these results are primarily descriptive in nature. The contingency tables for
distributions which did not have at least 20% of the cells with expected mean values of 5 are not presented in this analysis. Distributions which reached this criteria are presented. Several of the distributions barely met this criteria. The intent of this presentation is primarily to describe the nature of the relationship between identity status and the status variables, as this has not been attempted previously. For this analysis, occupational level was divided into three separate categories: Professional (doctors, lawyers, engineers); Middle status (white collar, service workers, sales, clerks); and semi-skilled workers (hourly employees). The professional group contained 20 subjects, the middle status 17, and the semi-skilled 18.

a. Overall identity status

The chi square for this analysis revealed a non-significant chi square statistic \( \chi^2 = 7.47, \text{df} = 6, \ p = .28 \) for overall identity status and occupational level. These results are contained in Table 7. A perusal of Table 7 reveals that the greatest percentage of each occupational level can be found in the achieved category (80%). Ninety per cent of the professional status, and 88% of the middle status are achieved. Only for the semi-skilled, where 61% of the sample are achieved, is there a real departure from this trend.

b. Retirement related identity status

A chi square describing the distribution of subjects for retirement related identity by occupational level was evaluated. The results, found in Table 8, indicate a non-significant chi square \( \chi^2 = 7.79, \text{df} = 6, \ p = .25 \). An examination of the contingency table reveals more respondents in statuses other than the achieved
category, as has been observed in the ratings for overall identity. The greatest percentage of all respondents can be found in the achieved (36.9%) and moratorium (41.5%) categories, indicating that very few respondents have foreclosed upon an identity during retirement, or are diffuse about it either.

**TABLE 7**

Chi Square for Overall Identity by Occupational Level

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>18</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(32.7%)</td>
<td>(1.8%)</td>
<td>(0%)</td>
<td>(1.8%)</td>
</tr>
<tr>
<td>Middle</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(27.2%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td>(3.6%)</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>(20%)</td>
<td>(3.6%)</td>
<td>(1.8%)</td>
<td>(7.2%)</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 7.47 \]
\[ p = .28 \]

c. Ideological identity status

The chi square distribution for this analysis revealed a non-significant statistic for ideological status by occupational level \( (\chi^2 = 7.74, df = 4, p = .11) \). The results are contained in Table 9.
The table reveals the greatest proportion of individuals are in the achieved status for all 3 occupational levels (82.9%). It also reveals a larger proportion of workers in the diffusion category are from the semi-skilled group.

### TABLE 8

Chi Square for Retirement Related Identity by Occupational Level

<table>
<thead>
<tr>
<th>Occupational Level</th>
<th>Occupational Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>(22.8%)</td>
</tr>
<tr>
<td>Middle</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>(7.5%)</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(9.4%)</td>
</tr>
</tbody>
</table>

\[ x^2 = 7.79 \]

\[ p = 0.25 \]
The results contained in Table 7 were collapsed so as to compare the achieved status versus the remaining statuses. Results are contained in Table 10. The results reveal a significant chi square statistic ($X^2 = 11.00$, df = 2, $p < .01$). These results provide further support for the data reported. Eighty per cent of the total sample are achieved. The greatest percent of each status are in the achieved category. For the semi-skilled workers, 61% are achieved and 29% are found in the other statuses, an although these results are significant ($X^2 = 8.0$, df = 1, $p < .01$) and in the same direction as those observed for the professional and middle status groups, the effects are less
The results contained in Table 9 were collapsed to compare the achieved status versus the remaining statuses for ideological identity for occupational level. These results are contained in Table 11. Results reveal a non-significant chi square statistic ($X^2 = 3.90$, df = 2, $p > .05$). The findings show that for the ideological identity by occupational level the greatest percentage of subjects are in the achieved status (83%). The table also reveals that for the semi-skilled subjects, a greater percentage of them can be found in the non-achieved categories. These findings suggest that something different is happening in members of the semi-skilled group than is occurring for

<table>
<thead>
<tr>
<th>Occupational Level</th>
<th>Occupational Status</th>
<th>Achieved Fore., Mora., and Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>18</td>
<td>2 (32.7%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.6%)</td>
</tr>
<tr>
<td>Middle</td>
<td>15</td>
<td>2 (27.2%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.6%)</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>11</td>
<td>7 (20%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(12.7%)</td>
</tr>
</tbody>
</table>

$X^2 = 11.00$

$p < .01$
TABLE 11
Chi Square for Achieved versus Remaining Statuses for Ideological Identity by Occupational Level

<table>
<thead>
<tr>
<th>Occupational Level</th>
<th>Ideological Status</th>
<th>Achieved</th>
<th>Prof., Mora., and Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>12</td>
<td>2</td>
<td>(25.5%) (4.3%)</td>
</tr>
<tr>
<td>Middle</td>
<td>15</td>
<td>1</td>
<td>(31.9%) (2.1%)</td>
</tr>
<tr>
<td>Semi-skilled</td>
<td>7</td>
<td>5</td>
<td>(14.9%) (10.6%)</td>
</tr>
</tbody>
</table>

\[ x^2 = 3.90 \]
\[ p > .05 \]

Summary: These results indicate that the largest percentage of each occupational level can be located in the achieved status. This holds true with one exception, the semi-skilled workers, who show a greater proportion in the different status for the overall and ideological analyses. Retirement related identity represents a departure from the other analyses, showing fewer individuals in the achieved status and a greater number in the moratorium status.
2. **Time Until Retirement**

Separate chi square tables were used to describe the distribution of identity status by time until retirement. Time until retirement was divided into 4 separate time frames for this analysis: a) 0 to 6 months; b) 7 months to 12 months; c) 13 to 24 months; d) 25 to 36 months.

a. **Overall identity status**

The chi square analysis for time until retirement by overall identity status revealed a non-significant statistic ($X^2 = 9.73, df = 9, p = .37$). The results are contained in Table 12. As previously noted in the analysis of occupational level, the greatest proportion of individuals for all 4 levels were found in the achieved status (80.0%). For the 0-6 month group, 81% are achieved, for the 7-12 month group, 87%, and for the 13-24 month group, 86% are achieved. For the last group, the group furthest from retiring, only 64% are achieved (9 of the 13 subjects).
TABLE 12
Chi Square for Overall Identity by Time Until Retirement

<table>
<thead>
<tr>
<th>Time Until Retirement</th>
<th>Overall Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 6 months</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>(16.3%)</td>
</tr>
<tr>
<td>7 to 12 months</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>(23.6%)</td>
</tr>
<tr>
<td>13 to 24 months</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>(23.6%)</td>
</tr>
<tr>
<td>25 to 36 months</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>(16.4%)</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 9.73 \]
\[ p = .37 \]

B. Retirement related identity status

A chi square statistic was computed to describe time until retirement for retirement related identity. The results indicated a non-significant statistic \( (\chi^2 = 7.47, df = 9, p = .59) \). The results are contained in Table 13. An examination of the table reveals a wider distribution of subjects among all four of the statuses than reported for the overall analysis. This trend was found in each of the analyses for retirement related identity.

The results for Table 12 were collapsed and the achieved status was compared to the other statuses combined. Results are found in Table 14. These results reveal a non-significant chi square statistic.
\( (X^2 = 4.63, \text{df} = 3, p > .05) \) indicating that chance alone is operating. The results show that 80% of the sample are in the achieved category. This effect is particularly noticeable for all but the 25 to 36 month group. Among the 25 to 36 month group a greater percentage (35%) of this group are not achieved, however, these results are not significantly different than found in the other groups.

**TABLE 13**

Chi Square for Retirement Related Identity by Time Until Retirement

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 6 months</td>
<td></td>
<td>6 (11.3%)</td>
<td>1 (1.8%)</td>
<td>3 (5.6%)</td>
<td>1 (1.8%)</td>
</tr>
<tr>
<td>7 to 12 months</td>
<td></td>
<td>3 (5.6%)</td>
<td>1 (1.8%)</td>
<td>9 (17%)</td>
<td>1 (1.8%)</td>
</tr>
<tr>
<td>13 to 24 months</td>
<td></td>
<td>7 (13.2%)</td>
<td>1 (1.8%)</td>
<td>4 (7.5%)</td>
<td>2 (3.6%)</td>
</tr>
<tr>
<td>25 to 36 months</td>
<td></td>
<td>5 (9.4%)</td>
<td>0 (0%)</td>
<td>6 (11.3%)</td>
<td>3 (5.4%)</td>
</tr>
</tbody>
</table>

\( x^2 = 7.47 \)

\( p = .59 \)
Chi Square for Achieved versus Remaining Statuses for Overall Identity for Time Until Retirement

<table>
<thead>
<tr>
<th>Time Until Retirement</th>
<th>Achiev.</th>
<th>Fore., Mora., and Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 6 months</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(16.4%)</td>
<td>(3.6%)</td>
</tr>
<tr>
<td>7 to 12 months</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(23.6%)</td>
<td>(3.6%)</td>
</tr>
<tr>
<td>13 to 24 months</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(23.6%)</td>
<td>(3.6%)</td>
</tr>
<tr>
<td>25 to 36 months</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(16.4%)</td>
<td>(9%)</td>
</tr>
</tbody>
</table>

\[ X^2 = 4.63 \]
\[ p > .05 \]

Summary: For overall identity, most individuals were found in the achieved status. However, for retirement related identity, a larger percentage are in the moratorium status.

A comparison of achieved versus the remaining statuses indicated that most individuals were in the achieved status. The only noticeable, but non-significant difference, was observed for the 25 to 36 month group, where a greater percentage (35%) were in the non-achieved status.

3. Educational Level

Educational level and overall identity status were examined by chi square distribution. The distributions for retirement related identity...
and ideological identity did not contain enough subjects in each of the cells to warrant presentation here. Educational level was assessed on 5 levels: a) those with advanced college degrees; b) those with college degrees; c) those with some college; d) those with an high school diploma or equivalency; e) those who had not graduated from high school.

a. Overall identity status

Results of the chi square for this analysis revealed a non-significant statistic ($X^2 = 14.52$, df = 12, $p = .27$). (See Table 15). The highest percentage of respondents were in the achieved category (80%). All of the advanced groups were labeled achieved. Only the no high school groups showed a noticeable proportion of respondents in any other category (36% were diffuse).

TABLE 15
Chi Square for Overall Identity by Educational Level

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(12.7%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td>(0%)</td>
</tr>
<tr>
<td>College</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>(18.2%)</td>
<td>(1.8%)</td>
<td>(0%)</td>
<td>(1.8%)</td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>(23.6%)</td>
<td>(0%)</td>
<td>(0%)</td>
<td>(1.8%)</td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>(16.4%)</td>
<td>(1.8%)</td>
<td>(0%)</td>
<td>(1.8%)</td>
<td></td>
</tr>
<tr>
<td>No High School</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>(9.1%)</td>
<td>(1.8%)</td>
<td>(1.8%)</td>
<td>(7.2%)</td>
<td></td>
</tr>
</tbody>
</table>

$x^2 = 14.52$
$p = .27$
The results contained in Table 15 were collapsed to evaluate the achieved versus the remaining statuses for educational level. The results show that the greatest percentage of subjects can be found in the achieved status \( (X^2 = 11.52, df = 4, p < .01) \). However, for the no high school group, the greatest percentage of subjects were contained in the non-achieved statuses. These results represent a significant departure from the rest of the sample \( (X^2 = 2, df = 1, p < .01) \). (See Table 16.)

4. Summary of status variables

Although primarily descriptive in nature, these results indicate that for overall and ideological identity, the greatest percentage of respondents have achieved an identity. The results also indicate that retirement related identity shows a different response pattern than observed in the overall and ideological analyses, with greater numbers of subjects in the moratorium category. This results was in the expected direction. The chi square table also revealed that status variables did not discriminate among the statuses. Most of the respondents in every category were identity achieved. Only for the lowest occupational level and the time furtherest from retirement was there a moderate departure from these results, and even then, most of the subjects were identity achieved. However, for educational level, it was observed that a greater per cent of the no high school group were not achieved. This result was significantly different than expected by chance alone.
Chi Square for Achieved versus Remaining Statuses for Educational Level for Overall Status

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Achieve.</th>
<th>Fore., Mora., Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(12.7%)</td>
<td>(0%)</td>
</tr>
<tr>
<td>College</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(18.2%)</td>
<td>(3.6%)</td>
</tr>
<tr>
<td>Some College</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(23.6%)</td>
<td>(1.8%)</td>
</tr>
<tr>
<td>High School</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(16.4%)</td>
<td>(3.6%)</td>
</tr>
<tr>
<td>No High School</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(9.1%)</td>
<td>(10.9%)</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 11.52 \]

\[ p < .01 \]

B. Analysis of the Task Variables

A number of task variables, the Concept Attainment Task, Adorno's authoritarian-submission scale, a life satisfaction measure, and the Wechsler Adult Intelligence Scale (Vocabulary Test), were examined in regard to their ability to differentiate between the statuses. Although no specific hypotheses were made for retirement related identity and ideological identity, separate analyses were made for each identity category. An analysis of overall identity was also attempted. Each variable was subjected to a one way analysis of variance and individual t-tests were also examined.
1. **Stressful Concept Attainment Task**

   a. **Overall scores**

   The stressful concept attainment task was hypothesized to discriminate between the statuses, in that, as Marcia discovered, achieved respondents should score highest because they would be less concerned about "impressing" a stranger. They would be less fearful of failure. Their strong ego would compensate for the effect of being in a stressful situation. Overall means for performance on the CAT are found in Table 17.

   **TABLE 17**
   
   CAT Scores for Identity Statuses

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>36</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>M</td>
<td>425.56</td>
<td>357.5</td>
<td>395</td>
<td>446</td>
</tr>
</tbody>
</table>

   When these data were subjected to a one way analysis of variance, results indicated no significant relationship between CAT scores and overall identity status ($F = .26, df = 3/40, p > .05$). These results suggest little, if any, relationship exists. The reader should be aware, however, that due to the skewed nature of the distribution, with the large number of subjects in the achieved category, the analysis of variance is of little value in its ability to detect these differences.
In effect, since most of all of the respondents are in one category there is very little variance to be detected. Therefore, the analysis breaks down. The tables presented in this section are primarily for descriptive purposes. The problem associated with the bunching up of subjects will be observed throughout this entire discussion. Table 18 contains the analysis of variance data for this group of scores.

**TABLE 18**

*Analysis of Variance for CAT Scores by Overall Identity*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Statuses</td>
<td>3</td>
<td>12371.00</td>
<td>4123.67</td>
<td>.26</td>
</tr>
<tr>
<td>Within Statuses</td>
<td>40</td>
<td>635392.00</td>
<td>15884.8</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>647763.00</td>
<td></td>
<td>p &gt; .05</td>
</tr>
</tbody>
</table>

b. **Retirement Related Identity**

Overall means for the CAT for retirement related identity are presented in Table 19.

**TABLE 19**

*CAT Scores for Identity Status for Identity Related Identity*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>17</td>
<td>2</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>M</td>
<td>432.64</td>
<td>452.5</td>
<td>421.5</td>
<td>425.83</td>
</tr>
</tbody>
</table>
When these data were subjected to a one way analysis of variance, a non-significant F was obtained ($F = .04, df = 3/37, p > .05$). (See Table 20).

**TABLE 20**

Analysis of Variance for CAT Scores by Retirement Related Identity

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Statuses</td>
<td>3</td>
<td>2353.00</td>
<td>784.55</td>
<td>.04</td>
</tr>
<tr>
<td>Within Statuses</td>
<td>37</td>
<td>631471.000</td>
<td>17066.00</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>633824.00</td>
<td></td>
<td>p &gt; .05</td>
</tr>
</tbody>
</table>

The hypotheses that achieved would score highest on this variable was not confirmed. These results show no significant relationship between retirement related identity and performance on the CAT. In a point of explanation, although the analysis of variance was not significant, individual t-tests were run in an attempt to test one of the research hypotheses that achieved would score higher on this measure than the other statuses. This was not confirmed. Once again, however, the small number of subjects in the foreclosed and diffused categories and the large number of individuals in the achieved status, render this analysis very weak in its overall statement of effects. In addition, with the insignificant F statistic, even if significant results had been observed they would have been greatly suspect in their accuracy.
TABLE 21
T-Tests for CAT Scores by Retirement Related Identity

<table>
<thead>
<tr>
<th>Groups compared</th>
<th>t value</th>
<th>t prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achiev. vs. Fore.</td>
<td>.20</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Achiev. vs. Mora.</td>
<td>-.25</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Achiev. vs. Diff.</td>
<td>.11</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Fore. vs. Mora.</td>
<td>.32</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Fore. vs. Diff.</td>
<td>.24</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Mora. vs. Diff.</td>
<td>-.07</td>
<td>&gt; .05</td>
</tr>
<tr>
<td>Achiev. vs. Fore., Mora., &amp; Diff.</td>
<td>-.07</td>
<td>&gt; .05</td>
</tr>
</tbody>
</table>

Dunn's LSD procedure was used to obtain the t statistic. A value greater than or equal to 2.86 was needed to reach an .05 level of significance.

c. Ideology scores

The overall means for this analysis of the CAT by Ideological identity status are presented in Table 22.

TABLE 22
CAT Scores for Identity Status
for Ideological Identity

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>32</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>M</td>
<td>433.75</td>
<td>357.5</td>
<td>0</td>
<td>466.67</td>
</tr>
</tbody>
</table>
These data were subjected to a one way analysis of variance, the results of which are found in Table 23.

TABLE 23
Analysis of Variance for CAT Scores by Ideological Identity Status

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Statuses</td>
<td>2</td>
<td>15263.00</td>
<td>7631.5</td>
<td>.43</td>
</tr>
<tr>
<td>Within Statuses</td>
<td>34</td>
<td>602613.00</td>
<td>17723.91</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>617876.00</td>
<td></td>
<td>p &gt; .05</td>
</tr>
</tbody>
</table>

These results indicate that no significant difference exists between ideological identity status and performance on the CAT (F = .43, df = 2/34, p > .05). There were no specific hypotheses regarding this analysis, it does however, follow the trend previously reported for the overall and retirement related identity statuses.

Summary: Based on the results of these analyses, there exists no significant difference between identity statuses (however measured) and performance on the CAT. This conclusion, however, is in large part due to the skewed nature of the distribution. The effect of finding such large numbers in one or two categories makes comparisons with the other categories inefficient and basically useless. There is no one in those statuses with whom to compare. The hypothesis that achieved would score significantly higher on this index than would the other statuses cannot be confirmed with these data.
2. **Life Satisfaction Index**
   
a. **Overall scores**
   
   These data are the life satisfaction scores for the overall identity status rating. The Life Satisfaction Index was hypothesized to discriminate between the statuses, in that individuals who had achieved an identity would be more likely to be satisfied with their present status in life. This measure was used to approximate ego integrity, Erikson's final stage. An achieved identity should allow one to pursue life review and prepare positively for death.
   
The overall scores for these data are found in Table 24.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>44</td>
<td>3</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>M</td>
<td>14.64</td>
<td>13.67</td>
<td>15</td>
<td>11</td>
</tr>
</tbody>
</table>

   These data were subjected to a one way analysis of variance. The results of this analysis are contained in Table 25.
Analysis of Variance for Life Satisfaction Scores by Overall Identity Status

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Statuses</td>
<td>3</td>
<td>81.26</td>
<td>27.09</td>
<td>3.46</td>
</tr>
<tr>
<td>Within Statuses</td>
<td>51</td>
<td>398.85</td>
<td>7.82</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td>480.11</td>
<td></td>
<td>p &gt; .05</td>
</tr>
</tbody>
</table>

These results indicate that an almost significant relationship exists between the Life Satisfaction Index and identity status ($F = 3.46$, df = 3/51, $p > .05$). These results suggest that, to a degree, the Life Satisfaction Index discriminates between the statuses. The reader is referred to the discussion on page 77 regarding an analysis of this type with such a skewed distribution.

Since the F statistic was almost significant and since a priori hypotheses regarding this relationship between life satisfaction and identity status had been made, some individual t-tests were examined. Results indicated that no differences were large enough to be detected. (See Table 26.)
TABLE 26
T-Tests for Life Satisfaction Scores
by Overall Identity

<table>
<thead>
<tr>
<th>Groups compared</th>
<th>t value</th>
<th>t prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achiev. vs. Fore., Mora., and Diff.</td>
<td>-1.44</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>Achiev. and Mora. vs. Fore. and Diff.</td>
<td>.89</td>
<td>&gt;.05</td>
</tr>
</tbody>
</table>

Dunn's LSD for this analysis = 2.82.

b. Retirement Related Identity Scores

Overall scores for the Life Satisfaction Index for retirement related identity are presented in Table 27.

These data were also subjected to a one way analysis of variance. These results, found in Table 28, revealed the presence of a significant F (F = 8.15, df = 3/49, p < .05). These findings show that, for retirement related identity the Life Satisfaction Index discriminated between the statuses.

TABLE 27
Life Satisfaction Scores
for Retirement Related Identity

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>21</td>
<td>3</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td>M</td>
<td>15.52</td>
<td>15.67</td>
<td>13.77</td>
<td>10.28</td>
</tr>
</tbody>
</table>
Analysis of variance for life satisfaction by retirement related identity

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Statuses</td>
<td>3</td>
<td>154.12</td>
<td>51.37</td>
<td>8.15</td>
</tr>
<tr>
<td>Within Statuses</td>
<td>49</td>
<td>309.20</td>
<td>6.31</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>463.32</td>
<td></td>
<td>p &lt; .05</td>
</tr>
</tbody>
</table>

Analysis of the individual t-tests for these data, contained in Table 29, reveals three significant differences. Achieved individuals scored significantly higher than did moratoriums (t = 2.71, p < .05), diffused (t = 6.38, p < .01), and foreclosed, moratoriums and diffused combined (t = 3.83, p < .01). This suggests that individuals who have achieved an identity in the area of retirement, who are able to recognize themselves as retirees, are much more likely to feel positive about their life situation. Since there are nearly equivalent numbers of subjects in the achieved and moratorium statuses, the results of this particular analysis are more credible, statistically. These results at least partially support a major hypothesis of this study, that having achieved an identity is related to self-rated life satisfaction.
T-Tests for Life Satisfaction for Retirement Related Identity

<table>
<thead>
<tr>
<th>Groups compared</th>
<th>t value</th>
<th>t prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achiev. vs. Mora</td>
<td>2.71</td>
<td>&lt; .05</td>
</tr>
<tr>
<td>Achiev. vs. Diff.</td>
<td>6.38</td>
<td>&lt; .05</td>
</tr>
<tr>
<td>Achiev. vs. Fore., Mora., and Diff.</td>
<td>3.83</td>
<td>&lt; .05</td>
</tr>
</tbody>
</table>

Dunn's LSD for this analysis = 2.32

**c. Ideological Identity Status**

Table 33 contains the overall scores for Life Satisfaction Index for Ideological status ratings.

**TABLE 30**

Life Satisfaction Scores for Ideological Identity Status

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>39</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>M</td>
<td>14.69</td>
<td>13</td>
<td>0</td>
<td>11.83</td>
</tr>
</tbody>
</table>

These data were subjected to a one way analysis of variance. The results showed a non-significant $F( F = 1.45, df = 2/44, p >.05)$, which indicated that there is little discrimination between the statuses for the Life Satisfaction Index. There was no specific hypotheses regarding these comparisons. The reader is once again reminded of the problems in
interpreting the data from such a skewed distribution.

Summary: The hypothesis that achieved individuals would score highest on this measure was supported, especially for retirement related identity. Achieved individuals scored significantly higher than did moratoriums.

3. Authoritarianism scale
   a. Overall Identity scores

These data represent authoritarian-submission scores for the overall identity status rating. This measure was hypothesized to discriminate between the statuses, in that foreclosed persons, having adopted parental, and/or societal values, would more readily endorse an authoritarian perspective. The overall scores for this index are located in Table 31.

These data were evaluated by a one way analysis of variance. The results showed a non-significant $F(F = .24, df = 3/51, p > .05)$, which indicates that scores on the authoritarian scale do not discriminate among the statuses. (See Table 32). (Also see page 77 for a discussion of the nature of this analysis).

<table>
<thead>
<tr>
<th>TABLE 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoritarian-Submission Scores for Overall Identity Status</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>44</td>
<td>3</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>M</td>
<td>96.36</td>
<td>98.33</td>
<td>87</td>
<td>99.57</td>
</tr>
</tbody>
</table>
Analysis of Variance for Authoritarian-Submission Scores for Overall Identity Status

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Statuses</td>
<td>3</td>
<td>164.75</td>
<td>54.92</td>
<td>.24</td>
</tr>
<tr>
<td>Within Statuses</td>
<td>51</td>
<td>11520.56</td>
<td>229.12</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td>11685.31</td>
<td></td>
<td>p &gt; .05</td>
</tr>
</tbody>
</table>

b. Retirement Related Identity Scores

Overall scores for the authoritarian-submission scale for retirement related identity are found in Table 33. An analysis of variance of these data revealed a non-significant $F (F = .46, df = 3/49, p > .05)$. (See Table 34). These findings indicate that, for retirement related identity, there is no significant relationship between identity status and performance on the authoritarian measure.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>21</td>
<td>3</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td>M</td>
<td>95.57</td>
<td>102</td>
<td>93.68</td>
<td>98.57</td>
</tr>
</tbody>
</table>
Analysis of Variance for Authoritarian Scores by Retirement Related Identity

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Statuses</td>
<td>3</td>
<td>265.28</td>
<td>88.43</td>
<td>.46</td>
</tr>
<tr>
<td>Within Statuses</td>
<td>49</td>
<td>9481.63</td>
<td>193.50</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>9746.91</td>
<td>p &gt; .05</td>
<td></td>
</tr>
</tbody>
</table>

Although the F statistic was not significant, t-tests were examined to test for a priori comparisons. No tests were significant.

c. Ideological Identity Scores

Overall scores for the authoritarian-submission scale by ideological status are found in Table 35.

TABLE 35

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>39</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>M</td>
<td>99.69</td>
<td>94</td>
<td>0</td>
<td>104.16</td>
</tr>
</tbody>
</table>

A one way analysis of variance of these data revealed a non-significant F (F = .73, df = 2/44, p > .05). (See Table 36). These findings suggest that, for ideological identity, there is no significant relationship between identity status and performance on
the authoritarian measure. There were no apriori hypotheses regarding this relationship. It does, however, continue the trend observed for the overall and retirement related identity ratings on this same dimension.

TABLE 36
Analysis of Variance for Authoritarian-Submission Scores for Ideological Identity Status

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Statuses</td>
<td>2</td>
<td>316.56</td>
<td>105.51</td>
<td>.73</td>
</tr>
<tr>
<td>Within Statuses</td>
<td>44</td>
<td>9553.16</td>
<td>217.12</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>9869.72</td>
<td></td>
<td>p&lt;.05</td>
</tr>
</tbody>
</table>

4. WAIS Vocabulary Test

A separate analysis examining the relationship between identity status and performance on the WAIS vocabulary test was made. This test was used to discover if a relationship existed between performance on the CAT and the WAIS. There were no specific hypotheses regarding this variable.

a. Overall Identity Scores

Overall scores on the WAIS vocabulary test for overall identity status rating can be found in Table 37.

These data were subjected to a one way analysis of variance. Results show a significant relationship between overall identity status and performance of the vocabulary test (F = 8.70, df = 3/47, p < .01).

(See Table 38.)
### TABLE 37

Vocabulary Test Scores for Overall Identity Status

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>42</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>M</td>
<td>55.05</td>
<td>44.5</td>
<td>31.0</td>
<td>27.16</td>
</tr>
</tbody>
</table>

### TABLE 38

Analysis of Variance for Vocabulary Test Scores for Overall Identity Status

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Statuses</td>
<td>3</td>
<td>4580.06</td>
<td>1526.69</td>
<td>8.70</td>
</tr>
<tr>
<td>Within Statuses</td>
<td>47</td>
<td>8249.23</td>
<td>175.51</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>12829.29</td>
<td></td>
<td>p&lt;.01</td>
</tr>
</tbody>
</table>

b. Retirement Related Identity

Table 39 contains the overall scores for performance on the vocabulary test for retirement related identity.
The one way analysis of variance for these data revealed that performance on the WAIS vocabulary test discriminates significantly between retirement related identity statuses ($F = 4.90$, $df = 3/45$, $p < .05$). (See Table 40).

**TABLE 40**

Analysis of Variance for Vocabulary Test Scores by Retirement Related Identity

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Statuses</td>
<td>3</td>
<td>3222.69</td>
<td>1074.23</td>
<td>4.90</td>
</tr>
<tr>
<td>Within Statuses</td>
<td>45</td>
<td>9853.52</td>
<td>218.96</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>13076.21</td>
<td></td>
<td>$p &lt; .05$</td>
</tr>
</tbody>
</table>

Although the nature of the distribution makes analysis of $t$-tests tentative, they are presented for this analysis because the specific interest of this study in retirement related identity. Results indicate one important difference. The respondents in the achieved category scored significantly higher than those respondents in the foreclosed,
moratorium, and diffused categories combined \( t = 4.66, p < .01 \).
(See Table 41). No hypotheses were generated for this measure.
These results indicate the salience of the achieved status as identified by performance on the WAIS vocabulary test.

TABLE 41
T-tests for Vocabulary Test Scores for Retirement Related Identity

<table>
<thead>
<tr>
<th>Groups compared</th>
<th>t value</th>
<th>t prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achiev. vs. Mora.</td>
<td>1.96</td>
<td>.05</td>
</tr>
<tr>
<td>Achiev. vs. Fore., Mora., and Diff.</td>
<td>4.66</td>
<td>.05</td>
</tr>
</tbody>
</table>

Dunn's LSD for this analysis = 2.33

c. Ideiological Identity Status

The overall scores for the WAIS vocabulary test for ideological identity status are found in Table 42.

TABLE 42
Vocabulary Test Scores for Ideological Identity Status

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>38</td>
<td>2</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>M</td>
<td>56.21</td>
<td>44.5</td>
<td>0</td>
<td>22.2</td>
</tr>
</tbody>
</table>
An one way analysis of variance of these data was performed. The results, contained in Table 43, indicate a significant relationship between ideological identity status and performance on the WAIS vocabulary test ($F = 17.86$, $df = 2/42$, $p < .01$). These results indicate that performance on the WAIS vocabulary test differentiates significantly between the ratings for ideological identity.

**TABLE 43**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Statuses</td>
<td>2</td>
<td>5226.02</td>
<td>2613.01</td>
<td>17.86</td>
</tr>
<tr>
<td>Within Statuses</td>
<td>42</td>
<td>6145.62</td>
<td>146.32</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>11371.64</td>
<td></td>
<td>$p &lt; .01$</td>
</tr>
</tbody>
</table>

Summary: Although no hypotheses were generated for this measure, the results indicated a significant relationship between identity status and performance on the WAIS vocabulary test. The results are fairly consistent, in that the achieved status scored higher on this variable than did the other statuses. If this test functions as a measure of intelligence, then it would appear that level of intelligence is significantly related to identity status. The more intelligent one is, the more likely to be achieved. With reservations, these results are presented. The reader must exercise some judgment in accepting these findings at face value.
C. Correlation Between the Variables

Pearson product moment correlations were examined for each of the four task variables. Results of the analysis are found in Table 44. Results indicate only two significant correlations. A moderately significant, negative correlation exists between scores on the authoritarian measure and those on the vocabulary test ($r = -0.40$, $p < 0.001$). And a small, positive relationship was observed between performance on the Life Satisfaction Scale and performance on the WAIS vocabulary test ($r = 0.24$, $p < 0.05$). Although no specific hypotheses were presented, these results are consistent with results reported in the analysis of the task variables. Both the Life Satisfaction Index and the vocabulary test differentiated between the statuses in much the same fashion. Therefore, finding a significant relationship between these variables was not unexpected.

<table>
<thead>
<tr>
<th>Task Variables</th>
<th>CAT</th>
<th>Auth.</th>
<th>LSI</th>
<th>Vocab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT</td>
<td>.23</td>
<td>.13</td>
<td>-.24</td>
<td></td>
</tr>
<tr>
<td>Auth.</td>
<td>.17</td>
<td></td>
<td></td>
<td>-.40**</td>
</tr>
<tr>
<td>LSI</td>
<td></td>
<td></td>
<td></td>
<td>.24*</td>
</tr>
</tbody>
</table>

* $p < 0.05$
** $p < 0.001$
III. Adolescent Data

This portion of the analyses was undertaken for two specific reasons: a) to assess a more recent sample of college aged males using Marcia's original instrument. The original data were collected by Marcia in the early 1960's. These data were collected to reveal shifts, if any, in response patterns, perhaps due to generational differences, or to the irrelevancy of the instrument; b) to compare adolescent and adult samples on identity related issues, in an attempt to determine the relationship between adolescent and adult identity.

In the regard, 61 male freshmen were interviewed and assigned to one of four identity statuses. Results of the chi square revealed a non-significant statistic ($X^2 = 1.72$, df = 1, $p = .19$). (See Table 45).

### TABLE 45

<table>
<thead>
<tr>
<th>Crisis</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity Achieved</td>
<td>26 (42.5%)</td>
<td>14 (23%)</td>
</tr>
<tr>
<td>Moratorium</td>
<td>10 (16%)</td>
<td>11 (18%)</td>
</tr>
</tbody>
</table>

$X^2 = 1.72$

$p = .19$
A perusal of this table reveals that 42.5% of the respondents were in the achieved category, more than twice the number found in the foreclosed and diffused categories (16% for foreclosed, 18% for diffuse), and almost double the number observed in the moratorium status (23%).

These data were compared with the data recorded in Marcia's (1964) original research to determine if significant differences existed between the samples. The results are found in Table 46.

TABLE 46
Chi Square for Identity Status for Two Adolescent Samples

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Marcia (1964)</td>
<td>18</td>
<td>23</td>
<td>22</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>(21.4%)</td>
<td>(27.3%)</td>
<td>(26.2%)</td>
<td>(25%)</td>
</tr>
<tr>
<td>Holstein (1981)</td>
<td>26</td>
<td>14</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(42.5%)</td>
<td>(23.0%)</td>
<td>(16%)</td>
<td>(18%)</td>
</tr>
</tbody>
</table>

$X^2 = 7.84$
$p < .05$

Results indicate a significant difference exists between the two sets of data ($X^2 = 7.84$, df = 3, $p < .05$). Separate chi square analyses revealed a significant difference only for the diffusion category. The number of diffusion found in this study is significantly less than was found in the original data. Although the data are by no means identical, there are no other significant differences. These data appear to indicate that the semi-structured interview still provides information which allows for discrimination of subjects to
IV. Comparison of Adolescent and Adult Data

A comparison of the adolescent and adult data was attempted for overall, occupational (which includes retirement related identity for the adult sample, and occupational choice for the adolescent group), and ideological identity. There were no specific hypotheses made for these comparisons. The comparisons were designed to illuminate the relationship between adolescent and adult identity and the effect of occupational issues on the identity process.

A. Overall identity status

A chi square analysis of adolescents and adults for overall identity status was computed. Results indicate a significant chi square statistic ($X^2 = 18.31$, df = 3, $p < .01$). (See Table 47).

| TABLE 47 |
| Chi Square for Adolescent and Adult Data for Overall Identity Status |

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Sample</td>
<td>43</td>
<td>3</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>(78.2%)</td>
<td>(5.5%)</td>
<td>(3.6%)</td>
<td>(12.7%)</td>
</tr>
<tr>
<td>Adolescent Sample</td>
<td>26</td>
<td>14</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(42.5%)</td>
<td>(23%)</td>
<td>(16%)</td>
<td>(18%)</td>
</tr>
</tbody>
</table>

$X^2 = 18.31$

$p < .01$
A perusal of Table 47 reveals that the greatest percentage of the respondents are in the achieved status. In fact, 59.5% are in the achieved group. Individual between group analyses were run. These results revealed that there are significantly more achieved among the adult sample than the adolescent sample ($\chi^2 = 4.2$, df = 1, $p < .05$). Results also show that there are significantly more foreclosures ($\chi^2 = 7.2$, df = 1, $p < .01$) and moratoriums ($\chi^2 = 5.4$, df = 1, $p < .05$) among the adolescents than the adults. No other differences were significant.

B. Occupational Identity Status

Chi square analysis of adolescents and adults for occupational identity status was computed. Results indicated a non-significant chi square statistic ($\chi^2 = 2.23$, df = 3, $p > .05$).

<table>
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<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Sample</td>
<td>21</td>
<td>2</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>(38.1%)</td>
<td>(5.4%)</td>
<td>(40%)</td>
<td>(12.7%)</td>
</tr>
<tr>
<td>Adolescent Sample</td>
<td>20</td>
<td>4</td>
<td>24</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>(38.4%)</td>
<td>(7.7%)</td>
<td>(46.1%)</td>
<td>(7.7%)</td>
</tr>
</tbody>
</table>

These data reveal that the largest numbers of respondents are in the achieved and moratorium statuses. There were no significant
differences between adolescents and adults for any individual status. These results reveal that occupational issues, whether entering or leaving, are of sufficient importance that many of the individuals are currently involved in questions regarding their occupational identity, or have asked and resolved their questions. (See Table 48).

C. Ideological Identity Status

A chi square was computed for ideological identity status for adolescent and adult populations. Results indicated a significant chi square statistic ($X^2 = 14.14$, df = 3, $p < .01$). These results are significantly different than expected by chance. (See Table 49.)

<table>
<thead>
<tr>
<th>TABLE 49</th>
<th>Chi Square for Adolescent and Adult Data for Ideological Identity Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Sample</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>(82.9%)</td>
</tr>
<tr>
<td>Adolescent Sample</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>(48.8%)</td>
</tr>
</tbody>
</table>

$X^2 = 14.14$

$p < .01$

These results reveal that the largest percentage of respondents are in the achieved status. This is particularly noticeable for the adult population. Individual analyses for differences between cells reveals that significantly more adults than adolescents were classified as achieved ($X^2 = 6.12$, df = 1, $p < .05$), and significantly more adolescents were classified as foreclosures ($X^2 = 7.14$, df = 1, $p < .05$).
Generally these results have shown that:

a) the largest percentage of adult respondents were classified as identity achieved in the overall and ideological status categories;

b) in the retirement related identity status (occupation), the achieved and moratorium statuses had nearly equivalent numbers of respondents;

c) there is a noticeable lack of foreclosed and identity diffused subjects in all of the analyses;

d) primarily due to the skewed nature of the distribution of respondents among the identity statuses, none of the variables discriminated between the identity categories. The only minor exceptions included: 1) occupational level, where the semi-skilled workers were more evenly spread out among the four identity status categories; 2) educational level, where for the overall rating, the no high school group were more evenly spread out among the four identity statuses;

e) also, primarily due to a large number of individuals in the achieved and moratorium statuses, the CAT and the authoritarian scales did not discriminate between the statuses, as predicted;

f) the life satisfaction index did achieved some success, in that achieved subjects scored higher on this dimension than did subjects
from the other statuses, especially moratoriums. This was particularly noticeable on scores in the identity during retirement analysis, where the number of subjects in each category was almost equal;

g) the WAIS vocabulary test discriminated between the statuses, although these results were tentative considering the large differences between the number of subjects in each status. In the retirement related identity analysis, where achieved and moratoriums were almost equal in numbers of subjects, the achieved did not score significantly higher.

h) in comparisons between the adolescent and adult samples:
1) for overall rating, there were significantly more achieved in the adult sample, and significantly more foreclosed and moratoriums in the adolescent sample; 2) for occupational rating (leaving versus choosing), there were no significant differences between the statuses for any category; 3) for ideological identity, there were significantly more adult achieved, and significantly more adolescent foreclosed.

What follows is an analysis and interpretation of the data just presented. There will be five main divisions of this analysis:
1) evaluation of the identity statuses themselves; 2) evaluation of the task variables; 3) comparison of the adolescent and adult data; 4) discussion of the implications of this research; 5) suggestions for future research.

I. The Statuses

The results of this study have shown that, for the overall and ideological statuses the largest percentage of subjects were labeled achieved. A quick perusal of the data reveals that 83% of the subjects
were rated identity achieved for the ideology category (religion and politics), while none of the subjects were moratorium. Clearly the influence of the ideology portion of the interview was felt in the overall rating, where retirement related identity and ideology are combined to produce a composite rating. In the ideology section of this analysis, among the interviewees there was noticeable lack of turmoil regarding religious and political issues. The greatest percentage knew exactly what they believed and how they had come to know what they believed, they were not in crisis. Almost all of them could point to areas where they disagreed with their parents, therefore they were not foreclosures. Basically, they knew where they stood and had felt that way for years. The main characteristic of the diffused was their noticeable lack of concern. Neither religion nor politics had ever interested them and they were not about to begin caring at this juncture in life. When ideology is not used in the evaluation, and occupational identity is considered separately, a marked difference is noted. For occupation, the achieved and moratorium statuses contain almost equivalent numbers of respondents. The large number of moratorium subjects might well be explained by the fact that retirement is a vital concern to these men, at least more so than ideological issues. It will, in effect, substantially change the area of their life in which they have invested most of their time. Regardless of their emotional commitment to the job, the commitment of energy and time is an important one, and one apparently not taken lightly. In addition, retirement may also be an event for which it is difficult to make specific and binding plans (and herein may lie the real reason
why many of the subjects were moratoriums). It is a unique event, and for most individuals, nothing they have experienced exactly coincides with what is about to occur. Friends may confide what it was like when they retired, but even when that had occurred it usually was not enough to assuage any real fears and concerns. Many of the men voiced real interest in what was to become of them once they had retired. Some asked how one could make plans for something they knew nothing about. Questions that men had about religion and politics were not addressed with such uncertainty or trepidation. Those issues had been resolved. It is also important to note that the achieved individuals had given serious thought to these issues. Almost without exception, they indicated that retirement was vitally important. They had consulted their wives, had considered alternatives, or had done some thinking about retirement. They were certain that they were not taking the event lightly. It would appear, then, that retirement is an important identity related issue of later adulthood.

Pondering the question of why were so few foreclosed individuals were observed, two specific explanations appear plausible. Throughout life most of the tasks which we perform have specific expectations and guidelines or roles. Retirement does not usually conform to a specific set of roles or assumptions. It has been conceptualized as a "role-less role" (Dowd, 1969). While there is some debate regarding Dowd's explanation, from these data, it became apparent that many individuals had relatively little idea of parental, or more accurately, societal, expectations of the retiree. By definition, the foreclosed individual must conform to a set of external
expectations originating from parents, society, spouse, relatives. This sample contained very few individuals who felt they even knew what others' expectations of them might be. Two of the foreclosed subjects, who departed from this generalization, include one individual whose father had retired at 65, his twin brother was to retire at 65, and he had always expected to retire at 65. He had never really considered any other alternative. A second subject was retiring because his wife said that it was time to do so. He had great difficulty discussing alternatives to the plans designed by his spouse. These examples, however, are the exceptions. Generally speaking, most men were unaware of what was expected of a retiree in this society.

An alternative explanation might be that foreclosures are functionally non-existent or extremely rare in late adulthood. Years of decision making might not lend itself to adopting others' plans for one's own life. Most of the men in this sample expressed a strong preference for their own decisions in this regard. They were not about to allow someone else to do their deciding for them. This issue was too important to trust to others. Probably, there exists an interaction between the retiree's real desire to make his own decision coupled with a real lack of knowledge of others' expectations that made finding men in the foreclosure status as difficult as it was.

Resolving the question of why were so few diffuse individuals observed is, perhaps, a more difficult task. This interviewer did not encounter anyone who was totally unconcerned with his retirement. Even the most diffuse, expressed an interest in their future. The overriding characteristic of the diffuse in this sample appeared to be resignation
that they would have to retire ("I just can't do anything about it"). They appeared more depressed ("I can't stand the thought of not working; what will I do now?") than the other statuses, and felt they had fewer options once they had retired. One of the most notable characteristics of these individuals was that they rarely thought about life after retirement. It was extremely difficult for them to even visualize a day of retirement, what they would do, where they would go, etc. In the real world, survival does not lend itself to these kinds of attitudes. Most men recognized this and worked at avoiding despondency ("If I let myself think about it, I'll go crazy"). Realistically, it would seem that being diffuse as an adult, would not at all be in an individual's best interest. It may be pathological. This survey, which contains only a few chronically diffuse persons, may actually reflect their status in the population. Fewer of them probably, and hopefully, exist.

Three status variables were also examined for their relationship to identity: occupational level, time until retirement, and educational level. Some specific hypotheses were made regarding the direction of these relationships, although these hypotheses were largely rejected because they were statistically non-significant. The most significant contribution to this lack of statistical support lies in the nature of the distribution of subjects across these dimensions. In the analyses of overall and ideological identity, the achieved category contained an overwhelming number of subjects. Many of the cells contained no subjects, many others only a very few. Even the retirement related identity analyses, the achieved and moratorium contained
subjects almost to exclusion of the other statuses. With these results, a strict statistical analysis is most unprofitable and unadvisable. In defense of the findings, it should be noted that these results appear to reflect the state of the population. They are consistent and reflect a good cross section of subjects. However, the severe nature of the distribution prevents true analyses of these data.

With that in mind, a closer analysis of some of these data reveals some rather interesting trends. The reader should be aware that these results are very tentative.

**Occupational level** - It was predicted that the higher the occupational level, the greater the likelihood of being achieved. For example, professional level subjects were expected to be more likely to have achieved an identity than semi-skilled subjects because the nature of their occupation provided substantially more (and better) opportunities following retirement. There was observed a greater number of the professional status in the achieved category, and although these results were not statistically significant, they were in the expected direction. Achieved and moratoriums were evenly divided in the middle and semi-skilled classes, and there were more diffused in the middle and lower classes. These results, though not significant statistically, were also in the expected direction. Streib and Schneider (1971) have found that workers in the professional status adjust more adequately to retirement, primarily because they have more options (things to do, better financial arrangements) following retirement. The lower status individuals are more limited, financially and in the activities they can pursue following retirement. The trend appears to
support this data. Psychodynamically, however, one does not feel that these distinctions are all that clear. The achieved, at all occupational levels, were roughly equivalent in their level of commitment. And the moratoriums in the professional status were just as uncertain in their thinking about retirement as were the moratoriums in the middle and semi-skilled categories. One did not get the idea that the members of the lower statuses were "suffering" any more than the professional level subjects. The differences that did emerge were probably related to the professional level workers' ability to verbalize rather than any real differences in identity development. For example, an individual might receive a moratorium or diffuse rating because the inability to express feelings about retirement provided the rater with evidence of confusion (crisis) and a lack of commitment on the part of the subject. A more articulate person might be more able to 'cover' those uncertainties, or cause them to be 'lost' in his language. As a final analysis, it would not seem that occupational status is a significant determinant in the development of the identity during retirement.

**Time until retirement** - It was predicted that the more time an individual had until retirement, the less likely he was to have an achieved retirement related identity. The rationale for this hypothesis was that the further retirement was from actuality, the less likely an individual would be to confront retirement issues. These data do not support this hypothesis. No real trends were observed in evaluating the results. Individuals who were retiring within 6 months were no more likely to be achieved, or less likely to be moratoriums than
were members of the other statuses. Apparently just being eligible for retirement (and all the males in this sample were eligible for immediate retirement) was a sufficient enough condition to nudge men to consider their options. Evidently, the mere passage of time, and with it the impending arrival of retirement, did not produce any more or less feelings of anxiety than were already manifest in the months preceding retirement. In further studies, it would certainly prove helpful to follow longitudinally, the path of the moratorium to assess whether or not resolution of this crisis (movement to achieved) is likely to be resolved early in the plans for retirement, or not at all. How accurate is "once a moratorium, always a moratorium"? However, from these data, the prediction that persons further away from retirement were less likely to be achieved must be rejected.

Educational level - The predictions for educational level were similar to those for occupational level. It was hypothesized that the more education that an individual has, the greater chance of achieving an identity. The more education an individual has, the greater the chance of having a higher occupational level, resulting in better and more varied opportunities following retirement. The analysis of educational level and identity development shows a similar pattern observed for occupational level and time until retirement, in that, most subjects were either moratoriums or achieved. However, this interviewer, in talking with the subjects, developed an overall feeling that things were not going as well for the no high school and high school groups. The no high school group was decidedly more variable than the other statuses. Comprising only 17% of the total population, the no high
school group made up 67% (2 of 3) of the foreclosures, and 3 of 7 of the diffusions. Members of this group appeared fairly disorganized, as if they did not grasp the immediacy and seriousness of the event they were rapidly approaching. It seemed to bewilder them and they appeared unequipped to deal with it. This feeling was more adequately described by several members of the high school group, 75% of which were moratoriums, who said "I really don't know what I'm going to do. I don't have too many options, and it really scares me." Statements such as this were largely absent in the other statuses. Members from the other statuses, even if they were uncertain of their plans, were more likely to say "I've always made it, and I will this time, too, though I'm not sure how". Even these glaring differences must be evaluated with the knowledge that most of the sample, regardless of educational level, were achieved and moratorium. However, a review of the actual interviews leads to the conclusion that the less educated individuals do not feel as comfortable in dealing with retirement as do the more educated individuals, regardless of their identity status.

II. The Task Variables
A. Concept Attainment Task

There appear to be a myriad of reasons why the CAT was not a significant discriminator between the statuses. The CAT, a behavioral and a psychodynamic measure, was to discriminate toward individuals who had strong egos and were unafraid of public failure (in other words - the achieved). It failed miserably. First of all, this author feels
as though the task was too difficult for most of the respondents to really comprehend. Very few really understood the object of the game, and many of the subjects made statements to the effect. In reality, the scores did not reflect the ability to grasp a concept. One subject, though carefully instructed, guessed until the correct concept had been named. Although his score was low, he never understood how he was to attain the concept. When requested to play the role of the teacher, he was unable to select a concept and locate an example on the chart. While most persons understood the task more clearly than this individual, it seems apparent that most of the subjects did not have a thorough understanding of this task.

Secondly, it is possible that this task was perceived to be "school-like" and irrelevant to retirement. Research indicated that for tasks which are perceived irrelevant to everyday living, the elderly do not perform as well as their younger counterparts. There was some evidence of this in the verbalizations of the subjects. The experimenter was repeatedly questioned regarding the relationship of this test to retirement. And although an explanation was provided, it usually did not satisfy the subject. They still complained, and complied because they had been asked to do so.

Thirdly, it is also possible that the solicitation did not produce feelings of anxiety or stress. Most individuals appeared to ignore the time element, proceeding at their own pace, and most individuals were unconcerned about their score and did not respond, either positively or negatively, to the information that the test did not actually assess intelligence. For college students, in the presence of a faculty
member, this task may be very stressful, but it did not appear to serve that function for the adult sample. These results may well indicate that the CAT is not a particularly useful instrument for testing differences in identity status. Perhaps another task, less difficult and less school oriented would have produced more positive results. An alternative explanation is that the CAT scores are accurate, and the statuses are invalid in adulthood. Although this does not appear likely in that the actual interviews show the range of the four categories, this explanation must at least be entertained. Again, the unusual nature of the results make precise statements very difficult to make. Additional research in this area is certainly warranted.

B. Authoritarianism

Foreclosures were predicted to endorse authoritarian values to a greater extent than were the other statuses. In this study there were only 3 foreclosures, therefore an analysis of this relationship was impossible. Even the actual interviews give few clues as to the veridical nature of this issue. This research question remains unanswered.

C. Life Satisfaction Index

The relationship between Life Satisfaction and the status variables was as predicted. The achieved were significantly more satisfied than moratoriums and diffused. This relationship is particularly noticeable when comparing achieved versus the moratoriums, where the N's were almost equal. For this relationship, achieved were significantly more satisfied. Generally speaking, while listening to the interviews, the achieved appeared more satisfied,
more prepared, more willing to go on, even if they had no definite plans. They seemed to feel a definite release from the responsibilities of a work routine. Moratoriums and diffuse did not appear to be quite as pleased about retirement. They were more likely to view retirement as financial uncertainty, and an overabundance of unstructured time. They were less likely to have any real hobbies they intended to pursue. The achieved were more ready to deal with retirement. Some of them did not have specific plans, but verbalized that they had been fairly active throughout their lifetime and felt that they had enough viable options to adequately fill the extra time. One achieved individual commented that he was looking forward to retirement. He had begun to build a small pipe organ in his home and he wanted to devote more time to that. Further, he had started to compile a number of picture albums depicting the history of his family. He had begun life review. For this particular dimension, the Life Satisfaction and the material contained in the interviews was complementary and consistent. Therefore, the results which support the prediction that individuals who have achieved an identity during retirement will report higher levels of life satisfaction, is supported from both sets of data.

D. WAIS vocabulary

The vocabulary measure was included primarily to assess the relationship of performance of the CAT with a simplistic measure of intelligence. Since participants had a difficult time understanding the requirements for successfully completing the CAT, the WAIS vocabulary scale was added in attempt to attain information regarding cognitive functioning. Performance on the CAT and WAIS did not correlate
highly or significantly. Instead, for retirement related identity performance on the WAIS discriminated in its own right between the statuses, with the achieved scoring significantly higher than the diffused and the moratoriums, and foreclosed. Marcia and others have found that intelligence, per se, does not have a strong relationship to identity status, therefore, a primary reason for this observed relationship appears to lie in the differences in verbal fluency between these two groups. The achieved tended to be more articulate than any of the other groups. In fact, verbal ability was a major determinant in assigning an individual to a particular status. (Particularly evident among the moratorium and diffuse) was the inability to articulate any real plans, concerns, or ideas about the future. In developing criteria for assignment, it was determined that the ability to verbalize, at least in part, suggested that the respondent had thought about retirement prior to the interview. In the evaluation of the interviews, this was definitely apparent. Moratoriums and diffused were more likely to confess that retirement related issues were something they had either not considered or were in the process of considering. For this reason, it would seem as though the vocabulary test points to real identity related issues in that the ability to articulate, to present logical and coherent alternatives to questions about retirement, is a real component of identity, an important criterion for establishing an identity. Those who lack that ability do not fare as well identity wise. The results would support such a conclusion. Additional research to assess whether or not this verbal ability actually facilitates the adjustment to retirement (and not merely
identity level) would allow researchers to understand more clearly if many of the achieved actually have well developed plans and commitments or are merely more adept at verbal games and are, in reality, no more prepared than the moratoriums and diffused to face retirement. With this information, the relationship between verbal ability and identity development would be more clearly understood.

III. Comparison of Adult and Adolescent Samples

The results for the adolescent and adult data revealed that, for overall rating, there were significantly more achieved in the adult sample, and significantly more foreclosed and moratoriums in the adolescent sample. The ideology rating paralleled those findings except that no significant differences were observed in the moratorium status. No differences were observed in the occupational ratings. These results tend to support two basic conclusions: 1) that an identity development follows a development pattern toward identity achievement; and 2) that occupational issues are salient issues capable of producing identity type crises for both adolescents and adults.

The results reveal several interesting trends. Initially, it would appear that ideologically different things are happening between the samples. The adults had significantly more individuals who were achieved, while the adolescents had significantly more individuals who were foreclosed.

As mentioned previously, almost none (only 2 of 47) of the adult sample were foreclosed on an ideological identity. Instead, they knew what they believed, could generally verbalize in what areas and ways their views differed from their parents, and were also aware when and
for what reason(s) they had come to know what they believed. These findings are not supportive of Waterman and Waterman (1974), who found that most of their adult sample were foreclosed on ideology. They suggested that the process of identification may not be utilized as extensively in adulthood, or may not be as stable. The result of this study, those found in Amstey and Whitbourne, and Marcia (1976) cast some doubt on this evaluation, however. Marcia and Amstey and Whitbourne have indicated that the process of identity development and achievement is rarely static or stable. It changes and evolves reflecting new input from the environment. The adult subjects surveyed in this project were examples of having achieved an ideological identity. They were also examples of arriving at the same end point via various routes. Many of them reported having achieved a set of ideological beliefs early in life that were functioning, relatively in tact today. But several of them reported that they had recently, within the last 10 years, had an experience which had changed their religious or political beliefs. They had formed a new identity. And, this is also to say that experiences in the future will not force any of these identity achieved to a re-evaluation of their beliefs. In fact, many voiced interest in the legislation surrounding social security. They often commented that if problems developed which affected them personally, their basic beliefs regarding government and its relation to people could be threatened. This would trigger an ideological identity crisis. Waterman and Waterman may have evaluated adult identity differently than was done in this study, and with the large number of subjects in the foreclosure status one might presume this to be true.
If they did, it would most certainly have had an effect upon the final categorization of individuals into statuses. In this study the results indicate that an achieved ideological identity was really the rule, and not the exception, and that the identity process of achieving is not static entity, but an evolving process, capable of dealing with a reflecting change throughout the life cycle.

One might also interpret the adolescent data in this fashion as well. Significantly more of the adolescent sample expressed values which were reminiscent of their parents. These findings are not necessarily surprising. After all the adolescent sample had been enrolled in college for less than a full year and many of them were still living at home. It might be expected to have a sizeable number of foreclosed subjects. In the overall sample, however, the large number of achieved with nearly equal numbers of moratoriums, foreclosed and diffuse may indicate a movement from the less personally organized statuses to one which was more individually constructed. The data which leads to this conclusion includes a comparison of the adolescent and adult data, noting that the adults have almost no individuals in the foreclosed, moratorium and diffused categories. These results may imply movement toward identity achievement. Given more time this may well happen for the adolescent. In light of the content of the adult interviews, this would seem to be a logical conclusion. The shortcomings of any cross-sectional study in determining a developmental trend are, of course present here. Without longitudinal, or at least cross-sequential analyses, statements regarding development trends are educational guesses, at best. One cannot accurately approximate a real
developmental curve without more research into the middle adult years. Until that data is available, this is merely educated speculation based on these and other data.

The significance of the occupational identity rating is reflected by the similarities between the distributions. In both distributions, the achieved and moratorium categories contain almost equal numbers of subjects. Both distributions show slightly more moratoriums than achieved, and neither have a large number of foreclosures or diffusions. These data suggest the importance of occupational issues, for both groups. The adolescent and adult samples show high numbers of individuals who are moratoriums, individuals who are currently in crisis. These results were not observed in the ideological ratings. This would indicate that occupation is more of an issue than is religion or politics. Evidently leaving an occupation, with its uncertainty, lack of structure and unfamiliarity is capable of producing crisis in the adult. A similar set of circumstances forces adjustment for the adolescent. This is not to suggest that the crises or resolutions are identical, they are not. For example, foreclosed identities about retirement were virtually non-existent in the adult sample. The two adult subjects who were foreclosed were retiring because a twin brother had made plans for one, and a spouse for the other. Most of the rest of the sample had no real idea of what expectations others had for them. The foreclosed adolescents, on the other hand, had some idea of what they actually would do and were usually aware that their plans were a fulfillment of their parents plans for them. In that regard there were at least subtle differences between the statuses. These differences
not withstanding, however foreclosed subjects in both samples were characterized by their commitment to plans and by their own personal lack of involvement in choosing them.

In like fashion, moratoriums in both samples exhibited a real concern about uncertainty of their plans. While the adolescents were often experimenting with occupational options, by taking courses or part time jobs, the adults primarily confined their experimenting to mental questioning of what they might do. It was evident from the interview, however, that individuals from both groups were making an honest effort to reach a satisfactory conclusion and resolve the crisis. In addition, the achieved in both samples were characterized by very real goals and alternatives, plus viable and realistic methods of fulfilling those plans. Even the achieved who had not made specific plans were aware of their options and had made efforts to secure the ways to achieve those plans. In effect, they were prepared. These results support the writings of Whitbourne and Weinstock (1979) and Kalish (1969) who have suggested that maintaining and re-evaluating the identity is a life time endeavor, and that adolescents and adults face similar identity related issues. These results also show that identity is a developmental process in that with increasing age subjects move toward achieving an identity, as reflected by the small numbers of foreclosed, moratorium and diffused in the adult sample, and also by the fact that in the adolescent sample, the largest percentage of respondents in the ideology rating had moved into the achieved status. These results suggest that examination of identity during adulthood is an important research topic.
IV. Implications

As in any research, the results raise more questions and allow for many interpretations. This study is no exception. There appear to be a number of important implications to be evaluated in light of these data.

First, retirement-related identity is an issue that needs to be addressed, with all of its ramifications. This study supports findings from several previous studies. The results, found in comparing the adolescent and the adult samples on the three ratings of identity, support the contention that identity is not static, that it evolves and passes through re-evaluation when areas of the psyche, which are important to the individual, change, or are threatened. Retirement is one of those times. The observed differences in identity between the overall and ideological versus the occupational identity clearly illustrates this. Whitbourne (1979), Marcia (1971), and Waterman and Waterman's (1972) contention that identity development does not terminate with adolescence is supported by these data. It is also significant to note that achieving an identity appears to be a developmental process, not yet finished for many adolescents.

Secondly, there is some evidence to support the validity of the difference in the statuses. It was observed that certain statuses, particularly the achieved and moratorium, can be discriminated by their performance on the Life Satisfaction and vocabulary measures. The achieved groups scored higher than the moratoriums on both measures. Other differences may exist, as yet, unmeasured.
Third, at a later time, it will be important to provide some type of psychodynamic description of each of these statuses during retirement. The foreclosed status contained only 3 members, the diffuse just 7. If this sample is at all representative, and this study would indicate that it is, then are we to believe that foreclosures and the diffused are a 'rarity' in retirement? Waterman and Waterman reported most of their adult sample were foreclosed, in all 3 identity areas. Where have they gone? In retirement, are the foreclosure and diffuse statuses so maladaptive that to be in them means psychological suicide? Perhaps it does. Some more refined analyses would provide clearer understanding of this relationship.

Fourth, in addition to the objective differences observed on the task variables, the actual interviews revealed significant differences in men's approach to retirement. Although some individuals were more difficult to classify than others, after listening to the interviews, this interviewer felt that real differences existed between, for example, moratoriums and achieved. And not only do differences exist, but these differences could be detected as well. The modified Marcia (1964) interview, while perhaps needing some revision now that it has been at least partially validated with adults as subjects, stimulated and probed the retirees enough such that actual differences could be observed and rated.

Fifth, these results imply a need to provide assistance to potential retirees to facilitate verbalization of their ideas regarding retirement. If identity achievement is related to retirement, then
facilitating men to achieve an identity is an important task. The Teamsters, with whom this author worked, are vitally concerned about this very issue. Personnel files from their organization reveals an average life after retirement of 18–24 months among their hourly workers. The Teamsters were especially interested in this study because they felt the need to do something to increase the longevity of their workers. Primary education regarding retirement may facilitate more individuals achieving an identity in retirement. At the least, accurate information may make it more likely.

Finally, occupational and educational levels do not appear to make any real differences in thinking about retirement. Streib and Schneider (1971) have found differences in occupational level and adjustment to retirement. These data may indicate otherwise. Although achieving an identity may have little to do with how well an individual actually adjusts and accepts retirement, this relationship would be better understood if addressed more specifically, and this study appears to indicate the need to do just that.

In summary, these results contain both empirical and practical applications. The need to test more specifically some of the concerns cited above is apparent. The obligation to direct some of this information to the public may seem less apparent, but no less essential. The need to generate and disseminate information is imperative.

V. Suggestions

In the "if I were to do this again" category, there are a number of suggestions that seem readily apparent.
Locating some additional measures to validate the statuses is essential. The authoritarian scale may be outdated or too simplistic for elderly adults. The CAT was long, tedious, and depressing for the respondents who cared. It did not serve the function for which it was intended, perhaps for the reasons cited above, and perhaps for others that were not described. A task which is relevant and discourages (or eliminates) guessing might be more appropriate. Some pilot work in this area, would have been very beneficial. Some of the possible alternatives might have been attempted in this study if that information had been available.

Secondly, more foreclosures and diffused were needed to accurately determine "what they looked like and how they acted". Josselson (1973) for example, interviewed subjects until she had an equivalent number in each status. Although locating and interviewing potential retirees is difficult and time consuming, it would have been helpful to have subjects from those categories. These results indicate that very few may actually exist, however, it is important for further research to find and identify them. There is also a need to more precisely define a foreclosed adult. Waterman and Waterman (1974) provided a brief description, but it is not very precise. As mentioned above, the psychodynamic qualities of these two statuses must be developed in future research to understand what qualities are important in becoming and maintaining a foreclosed status in adulthood.

Thirdly, it would be helpful to correlate these results with other, more objective, identity measures. For example, Adams (1979) scale, even with its problems in wording and translating Marcia's ideas into
objective form, might be one possibility. If one is bent upon reducing 45 minutes of tape recorded interview into just a status rating, then a more objective instrument might do that just as well. Whitbourne's (1979) evaluation of identity, that of assessing the ability of an individual to accept more current information about themself, to avoid rigidity and inaccuracy, is currently being developed into an objective form. This method would help gather information more quickly and in greater quantity than was possible in this study. If, however, the intent of the researcher is to examine more closely the psychodynamic factors of each status, then this time consuming method should not be replaced.

Finally, it would seem logical to assume that if retirement can produce changes in identity, then perhaps other events do as well. More systematic research in this area is indicated by this research. Major events, such as the last child leaving home, may significantly effect a change in an individual's current identity. There may be other issues, as well. Whitbourne (1979) described several sources of change in adulthood and has suggested that any event perceived to be different from what was expected is likely to produce a resultant change in identity. Further, the event may not have to be discrepant, but only a change from normative patterns of behavior. Although an accurate description of these for all adults may be difficult, inaccurate, and impractical, it never-the-less appears to challenge researchers to describe the importance of these events. As an addition, sex differences could also be examined. For example, do women approach retirement any different than do men? What an excellent comparison study that would make.
Fifty-seven men were interviewed and assigned to an identity status, based on presence of a crisis and commitment during the retirement period of their life. These men were also given 4 behavioral tasks to complete which were hypothesized to discriminate between the statuses. In addition, status related information, also judged to discriminate between the statuses was gathered.

Several hypotheses were predicted for this study:

1) Retirement was hypothesized to be an event significant to produce identity change in adult males who were within 2-3 years of retirement. Evaluation of the data revealed that retirement was significantly related to identity development in adult males.

2) The achieved individuals were expected to perform better on the CAT, attesting to their ability to maintain ego control under stress. Due to the nature of the distribution, with large numbers of subjects in the achieved categories, this hypothesis was not confirmed. No significant differences were observed between the statuses.

3) Foreclosures, signifying their endorsement of authoritarian values, were expected to score highest on the authoritarian-submission scale. Due to the nature of distribution with only three foreclosures, this hypothesis was not confirmed. No significant differences were observed.
4) Achieved were expected to score highest on a measure of life satisfaction. The Life Satisfaction Index was to approximate ego integrity, Erikson's final stage. To attain integrity, one must be achieved. This prediction was confirmed. Achieved scored higher on the measure than moratoriums.

5) Although no predictions were made regarding performance on the WAIS vocabulary test, the results suggest that ability to perform verbally is significantly related to the ability to achieve identity during retirement. Achieved scored higher than moratoriums on this measure.

6) It was predicted that the closer an individual was to retirement, the more likely that individual was to be in the achieved status. This hypothesis was not confirmed. Evidently, just being 'near' retirement was enough to force individuals to evaluate retirement issues.

7) Educational level was hypothesized to distinguish between the statuses, with more educated individuals being more likely to achieve an identity. Since with more education the options during and following retirement are generally more numerous, it was predicted that this would allow for individuals to feel more positive about retirement. Due to the nature of the distribution, with most of the subjects as achieved, results did not confirm this hypothesis. All statuses, except for the no high school group, were equally likely to achieve an identity.

8) The adolescent and adult samples differed on overall identity and ideological identity. The adults showed significantly more subjects
in the achieved category, and the adolescents displayed more foreclosures in the overall and ideological ratings, and more moratoriums in the ideological analysis. These results were interpreted to indicate a developmental trend toward identity.

9) Adolescent and adult samples showed similar patterns on occupational identity indicating that occupational issues, choosing one or leaving one are a source of identity re-evaluation, which may recur throughout the life cycle.
APPENDIX A

INSTRUCTIONS FOR THE SEMI-STRUCTURED INTERVIEW

I am interested in some of the things that you might be facing now that you are ready to retire. By asking you some questions about retirement, having you fill out some questionnaires, I hope to gain some new insight into retirement.

First, I would like to ask you some questions about your job, your religious and political beliefs. Try and answer them as you really feel.
IDENTITY STATUS INTERVIEW

Introduction:

What year are you in?
Where are you from? Living at home?
How did you happen to come to (name of school)?

Did your father go to college? Where? What does he do now?
Did your mother go to college? Where? What does she do now?

Occupation

You said you were majoring in _______; what do you plan to do with it?
When did you come to decide on _______; Did you ever consider anything else?
What seems attractive about _______;?
Most parents have plans for their children, things they'd like them to go into or do - did yours have any plans like that for you?
How do your folks feel about your plans now?

How willing do you think you'd be to change this if something better came along? (If S responds: "What do you mean by better?")
Well, what might be better in your terms?

Religion

Do you have any particular religious affiliation or preference?
How about your folks?
Ever very active in church? How about now? Get into many religious discussions?
How do your parents feel about your beliefs now?
Are yours any different from theirs?

Was there any time when you came to doubt any of your religious beliefs?
When? How did it happen? How did you resolve your questions? How are things for you now?
Politics

Do you have any particular political preference?
How about your parents?
Ever take any kind of political action – join groups, write letters, participate in demonstrations – anything at all like that?
Any issues you feel pretty strongly about?
Any particular time when you decided on your political beliefs?
What did you think of the past election?
APPENDIX C

MODIFIED IDENTITY STATUS INTERVIEW

Occupation

What do you plan to do now that you're retiring? (Now that you've made a decision to retire, what do you plan to do?)

When did you decide to retire? What made you decide to retire? (Have you ever considered not retiring?)

What seems attractive about retiring? Unattractive?

Have you any regrets about retiring? (If so, what are they? Have you any regrets regarding your decision to retire?)

If the opportunity came along to change your mind about retiring, would you? (Would you go back to work if the opportunity came along?)

Sometimes wives/friends have plans (or ideas or expectations) for their husbands/friends about things like retirement. (For example, retiring at 65, or things they would like for you to do after you retire). Does your wife/friends have any plans like that for you? How does your wife/friends feel about your plans now?

What do you think society expects from persons your age? How do you think those expectations have influenced your plans for retirement? Do you agree with them? Would you be willing to change them? How?

Who, do you think, has been most influential in your thinking about retirement? (If needed: Spouse, parents, friends, media).

Do you feel as though the way retirement is pictured on TV is accurate? How is it different than what you've experienced?

Religion

Do you have any particular religious affiliation or preference?

How about your parents? (Spouse, children, friends).

Have you ever been very active in church? How about now? Do you ever get into many religious discussions?

How do your parents feel about your beliefs now? (If alive).

How did your parents feel about your beliefs? (If deceased).

Are your beliefs any different then theirs? How (in what ways)?

Was there any time(s) when you came to doubt any of your religious beliefs? When? How did it happen? How did you resolve your questions? How are things for you right now?
Politics

Do you have any particular political preference?  How about your parents? (Spouse, children, friends?)

Have you ever been involved in any kind of political action? (For example, have you ever joined any political groups, written letters, or participate in any demonstrations or marches, anything like that?)

Are there any issues about which you feel very strongly?

Was there any particular time when you decided on your political beliefs?

What did (do) you think about the past (upcoming) election?

Do you think that the political scene is accurately portrayed on TV?
APPENDIX D

CRITERIA FOR EVALUATING OCCUPATIONAL IDENTITY STATUS

Identity Achieved

Criteria: Individual has passed through a decision period (or crisis) and appears committed to his choices;

Sketch: There's a sense that this individual is not particularly troubled by retirement and will make the transition fairly smoothly.

1) Has considered several options (in regards to retirement) and has made some plans following retirement.
   a. I'm going to fish - got a new rod and reel.
   b. We're going to travel; we've even bought a motor home, joined Triple AAA.
   c. We're going to the Ozarks, we've bought a home and will move.
   d. Spend more time doing what I've done before.
   e. May not have specific plan, but has always adjusted adequately to prior circumstances in life.
   f. I've been involved in ______, and plan to spend more time. Always been active and will remain so.

2) Individual has no trouble seeing himself as a retiree.
   a. I've worked hard and I'm going to enjoy my retirement.
   b. I'm looking forward to it.
   c. I'm looking forward to slowing down (although I might work part time because I enjoy it).

3) Individual would not change plans now.
   a. No, we've made the plans, I wouldn't (couldn't) change plans, now; too much invested; couldn't think of anything better.

4) Choices are at least a deviation from parental, societal, or spouses ideals.
   a. I don't know what society expects, but it hasn't affected my decision.
   b. Well, the young guys at work think I should retire, but I make my own decisions.

5) Finds attractive things in retirement.
   a. Will allow me to do what I'd like to.
   b. No time schedule.
6) Does not feel negative aspects outweigh the attractive.

Foreclosure

Criteria: Has not passed through any real decision period, but appears committed to retirement plan.

Sketch: There's a sense that this individual, while having definite plans, is living out those plans because of someone else's designs. It is difficult to distinguish between goals (or expectations) of either society, co-workers, parents, spouses; no crisis period (or inconsequential ones); has (or is becoming) what others expect (living out what's expected of an individual at his age).

1) Committed to what he is going to do following retirement; (We've bought a house), we've never planned to do anything else.

2) Ideas of retirement come from society, wife: "My wife wants me to retire so we can spend more time together; she had me buy the house."; "My dad retired at 65, and I always expected that I would too."

3) Has no trouble seeing self as retiree: "It's pretty much what I expected."

Moratorium

Criteria: Individual is presently in crisis, he's trying to make up his mind; commitments are likely to be vague and general; there is an active struggle among alternatives; this struggle is of concern to the retiree.

1) Is considering several alternatives, but really doesn't know what he plans to do; not exactly sure when he'll retire.
   a. I may work, I might move, I might, but I really don't know.
   b. I could retire, but I'm not sure when I will, if I will.

2) Has difficulty deciding between attractive and unattractive aspects of retirement; doesn't now if he really wants to retire; can't decide if he really wants to retire or stay working.
   a. Tied me up in a knot; it concerns me that I don't know what I'll do.
   b. Unattractive, danger of becoming reclusive.

3) May be trying to incorporate society, wife, and his own values, goals, and expectations.
4) Has difficulty in seeing self as either a retiree or a worker.
   a. I have to retire (my company says so), but I don't know what that means.

Identity diffusion

Criteria: Individual has either experienced no crisis or passes through an inconsequential one; there is no commitment.

Sketch: This individual doesn't know what he'll do and is unconcerned. No choices about retirement have been made, nor is there much concern about it; if plans have been discussed or addressed, they would be readily changed.

1) May (plan to retire _____) "but don't know what I'll do when I get there; I may not make any; what comes comes"; it doesn't bother me, though (marked unconcern about retirement).

2) Doesn't know what to expect in retirement (can't tell till I get there, so I've not made any plans).

3) Doesn't really know what society expects and it hasn't effected his plans.

4) Doesn't really see self as either retiree or worker (but that's OK); I don't know what a retiree is suppose to do (but that's OK).
APPENDIX E

INSTRUCTIONS FOR VALUE PROFILE

Instructions

This questionnaire is designed to measure the extent to which you hold each of several general attitudes of values about which people in our society have different opinions.

This is not a test of intelligence or ability. There are no "right" or "wrong" answers — each person's values differ from those of other persons, in many respects.

Here is a series of general statements. You are to indicate how much you agree or disagree with them. Record your opinions in the blank space in front of each item according to the following scale:

+1 slight agreement  -1 slight disagreement
+2 moderate agreement  -2 moderate disagreement
+3 strong agreement  -3 strong disagreement

Read each item and decide quickly how you feel about it; then record the extent of your agreement or disagreement. Put down your first impressions.

The test is for research purposes only. Your answers will be strictly confidential.

BE SURE TO ANSWER EVERY QUESTION

1. I feel capable of handling myself in most social situations.

2. No sane, normal, decent person could ever think of hurting a close friend or relative.

3. If people would talk less and work more, everybody would be better off.

4. I seldom have fears that my actions will cause my friends to have low opinion of me.

5. It doesn't bother me to have to enter a room where other people have already gathered and are talking.

6. In group discussions I usually feel that my opinions are inferior to those of others in the group.
7. Every person would have complete faith in some supernatural power whose decisions he obeys without question.

8. I don't make a very favorable first impression on people.

9. What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders in whom the people can put their trust.

10. When confronted with a group of strangers, my first reaction is always one of shyness and inferiority.

11. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.

12. There is hardly anything lower than a person who does not feel a great love, gratitude, and respect for his parents.

13. It is extremely uncomfortable to accidentally go to a formal party in street clothes.

14. I don't spend as much time worrying about what people think of me.

15. People can be divided into two distinct classes: the weak and the strong.

16. When in a group, I very rarely express an opinion for fear of being thought ridiculous.

17. What the youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.

18. I am never at a loss for words when I am introduced to someone.

19. Obedience and respect for authority are the most important virtues children should learn.

20. Science has its place, but there are many important things that can never possibly be understood by the human mind.
APPENDIX F

INSTRUCTIONS FOR THE LIFE-SATISFACTION SCALE

Below are several statements about life situations. Some of them may be similar to what you believe, while others may not. In the blanks before each statement you are to indicate, by placing an X in either the agree or disagree column, whether or not the statement is true for you. If the statement is similar to what you believe, then mark an X in the agree column. If the statement is not true of you, then mark an X in the disagree column.

This is not a test of intelligence or ability. There are no "right" or "wrong" answers. Each person's values differ from those of other persons in many respects. These results are confidential and for research purposes only.

Try to work quickly and mark the answer that first comes to mind.

<table>
<thead>
<tr>
<th>Agree</th>
<th>Disagree</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A. I am just as happy as when I was younger.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B. These are the best years of my life.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. My life could be happier than it is now.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D. This is the dreariest time of my life.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E. Most of the things that I do are boring and monotonous.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F. Compared to other people, I get down in the dumps too often.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G. The things I do are as interesting to me as they ever were.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H. I have made plans for things I'll be doing a month or year from now.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I. Compared to other people my age, I make a good appearance.</td>
</tr>
</tbody>
</table>
J. As I grow older, things seem better than I thought.

K. I expect some interesting and pleasant things to happen to me in the future.

L. I feel old and somewhat tired.

M. As I look back on my life, I am fairly well satisfied.

N. I would not change my past life even if I could.

O. I've gotten pretty much what I expected out of life.

P. When I think back on my life, I didn't get most of the important things I wanted.

Q. In spite of what people say, the lot of the average man is getting worse, not better.

R. I have gotten more of the breaks in life than most of the people I know.
APPENDIX G

INSTRUCTIONS FOR THE WAIS VOCABULARY TEST

I have a list of words that I would like for you to define. I will read each word to you. I would then like for you to tell me what the word means. If you have any questions I will try to answer them for you.

Word List

1. Bed
2. Ship
3. Penny
4. Winter
5. Repair
6. Breakfast
7. Fabric
8. Slice
9. Assemble
10. Conceal
11. Enormous
12. Hasten
13. Sentence
14. Regulate
15. Commence
16. Ponder
17. Cavern
18. Designate
19. Domestic
20. Consume
21. Terminate
22. Obstruct
23. Remorse
24. Sanctuary
25. Matchless
26. Reluctant
27. Calamity
28. Fortitude
29. Tranquil
30. Edifice
31. Compassion
32. Tangible
33. Perimeter
34. Audacious
35. Ominous
36. Tirade
37. Encumber
38. Plagiarize
39. Impale
40. Travesty
APPENDIX H

CONCEPT-ATTAINMENT TASK

Instructions

In front of you is this chart with 32 different cards. Every one of these cards has 5 different characteristics. The characteristics are listed on this sheet. (hand S "Reminder Sheet") Each card has some shape, some color, some position, quantity, and size. For example, look at card 32. On this card the shape is square, the color is white, the position is left, the quantity is two, and finally the size is small.

As you can see, different cards on the display share different characteristics in common. All of these cards (4, 8, 9, 19, 27, 32) share the characteristics "white left". What characteristics do cards 3, 10, 12 share in common? (large, black)

This is how the test will operate. I shall choose 1, 2, or 3 characteristics from your list of 5 (five). I shall not tell you which ones I have chosen. I will have in mind all of the cards on the display that show that particular set of characteristics I have chosen. I will point to one of these cards. The task is for you to tell me, as soon as possible, which characteristics I have chosen.

You can determine this by finding out which other cards on the display also contain the characteristics I'm after. You will point to other cards that you think will help you and I will tell you whether
they are positive or negative. If I say positive, this means that everything that I have chosen is on that card as well as on the first card I pointed to. If the card is negative, this means that not all of the characteristics I have in mind are on that card. For example, suppose I chose the characteristics "2 large circles." If you pointed to any of these cards (18, 27, 29, 31) I would call them positive. If you pointed to any other cards I would call them negative since no other card contains exactly "2 large circles."

You can guess what I have in mind any time you want and as many times as you want. However, let me explain how your performance will be scored. You are trying to make as low a score as possible. You will be penalized 5 points every time you ask whether a card is positive or negative; 5 points for every 30 seconds that passes before you guess the correct answer; and 10 points for every wrong guess. I will turn over a penalty card here on this stand so that you may know at any time the amount of penalties you have accumulated.

Let's go through an example. Suppose I chose the concept "black square." I might point to card 3 as the first positive instance. You're trying to figure out which of the 5 characteristics I have chosen. You might suppose that I had chosen "1 large." To test this hunch, you would ask if card 24 is positive or negative. The card would be called negative and you know that your hunch was wrong. You would also know that the characteristic "square" might be in the answer. Next, you might point to card 28. This card is called positive. What you're trying to figure out is what characteristic does this card share with card 3. You can see that the quantities on the two cards differ. Card
3 has two figures; this card (28) has one. This tells you that "quantity" is not one of the things I have in mind. Size also can't be part of the concept because the figures aren't large on the first card and small on this one. At this point you might guess that I have "black square left" in mind since these are the only characteristics that are common to the positive cards. I would say no. Next you might choose card 10 to see if position is important. This card is called positive so you know that position is not important. You might guess that the answer is "black square" and you would be right. Remember, however, the answer might just be one thing such as "black" or "square" by itself since I can choose 1, 2, or 3 characteristics (Marcia, 1964).
APPENDIX I

DIRECTIONS FOR STRESSFUL CONCEPT-ATTAINMENT TASK

Treatment conditions

Stress in the CAT. Stress was defined here as externally imposed conditions which tend to impair performance. Although this is a far broader definition than Lazarus et. al. (1963) would agree to, our purpose here is not to study the stress itself, but the performance of different Identity Statuses on the CAT under stressful conditions. The particular type of stress used was both appropriate to the situation and to the Ss' general motivation as college students. For the particular purposes of this study we need to know only: Is the stress appropriate? And is it effective? The particular type of stress used was "evaluation apprehension".

Evaluation apprehension was created when the task E gave the S the following information prior to beginning the CAT:

By the way, I thought you might be interested to know that this test is related to tests of intelligence and that it's been found to be one of the best single predictors of success in college. So, of course, you'll want to do your very best. (Marcia, 1964)
APPENDIX J

REMINDER SHEET

The Five Characteristics

1. Figure
   Square
   Circle

2. Color
   White
   Black

3. Position
   Left
   Right

4. Quantity
   One
   Two

5. Size
   Large
   Small
APPENDIX K

SCORE SHEET FOR THE CONCEPT ATTAINMENT TASK

Subject__________________________

1. Estimate _________ Time__________ Points______

White, small Example: #5

Time ________

Total ________

2. Estimate _________ Time__________ Points______

Left, two Example: #26

Time ________

Total ________

3. Estimate _________ Time__________ Points______

Circle Example: #16

Time ________

Total ________

4. Estimate _________ Time__________ Points______

Square, black, small Example: #20

Time ________

Total ________

5. Estimate _________ Time__________ Points______

Black, one, small Example: #28

"Relax. Do fine".

Time ________

Total ________

6. Estimate _________ Time__________ Points______

Circle, right Example: #32

Time ________

Total ________
7. Estimate ______  Time ______

Square, white  Example: #13

Points ______
Time ______
Total ______
APPENDIX L

RECRUITMENT LETTER

I am a professor in the department of psychology at Mid-America Nazarene College in Olathe, Kansas and am currently involved in research examining various issues during retirement.

I am interested in the thoughts, feelings, and problems of those individuals who are contemplating retirement. They, as a group, certainly have special concerns not faced at any previous time in their lives. My interest is in issues faced in retirement (for example: what do I do with all my spare time?; what do I do to combat the loss of financial resources?) and their relationship to adjustment to retirement. It is the intent of this research project to find ways of preparing people for retirement. We hope to generate ideas and strategies for dealing with the new experiences that accompany retirement.

I need your help in locating men who are approaching retirement age and might be willing to participate in this study. I am writing you because of your position in relation to the working force. Your contact with working men and knowledge of their career plans would be of great service in the completion of this project. If you could supply me with the names and addresses of men who might be interested, I will contact them, explain the project, and request their cooperation. At that point they may choose whether or not they would be willing to participate. If they do not wish to become involved in the project I will not contact them again. If you have any men who are interested, but would prefer to have them contact me, either by phone or through the mail, my telephone number is: Office—(913) 782-3750, extension 320; home—(913) 764-6520. My address is Kenneth A. Holstein, Department of Psychology, Mid-America Nazarene College, P.O. Box 1776, Olathe, Kansas, 66061.

Whichever method is preferable (for example: you might choose to post this letter on a centrally located bulletin board or announce it at a meeting or in a weekly newsletter) I can assure you that strictest confidentiality will be observed and at no time or place will names of participants appear on any of the information.

Thank you for your cooperation. If you have any questions please feel free to call me and I will be of as much assistance as I can.

Sincerely,

Kenneth A. Holstein
BIBLIOGRAPHY


Marcia, J.E. Identity Six Years After: A Follow-Up Study. 


Waterman, A. and Waterman, C. A Longitudinal Study of Changes In Ego Identity Status from the Freshmen to the Senior Year at College. Devel. Psychol., 1974, 10, 387-392.
