RETIREMENT AS A CAREER TRANSITION

DISSERTATION

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* * * * *

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DEDICATION

This dissertation is dedicated to my parents, John and Eileen Sullivan, in appreciation for their unconditional love and support, and to my brother, Terry and sister, Cindy, for the love and laughter we've shared through the years.
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INTRODUCTION

RETIREMENT AS A CAREER TRANSITION

The purpose of this dissertation is to examine the types of retirement transitions that are precipitated by an option to retire early. A large midwestern university offered to purchase up to five years of service credit of faculty members age 50 and over who would retire in 1987 and 1988. The incentive plan provided a wonderful opportunity to study retirement and career decision making as the offer of the plan acted as a trigger event forcing people to consider career options which they may not have considered in the absence of the plan.

Faculty members eligible to retire under the incentive plan or under other retirement plans were surveyed. The effects of eligibility for the incentive plan, career stage, work attitudes, financial status and health upon the decision to retire or to remain with the organization were examined. Moreover, using Super's (1957) Theory of Career Stages, the psychological reasons why a person does or does not choose to retire from the organization were examined.
Chapter I of this dissertation provides a review of the past research on the retirement decision. Additionally, it reviews the career transitions literature, introduces it as the theoretical foundation for future retirement research and details the hypotheses. Chapter II presents the research design and methodology used to test the hypotheses. Chapter III presents the results of the empirical study. Chapter IV concludes the dissertation with a discussion of the results and directions for future research.
CHAPTER I
LITERATURE REVIEW AND HYPOTHESES

The career transition of retirement is one of the most under-researched topics in organizational behavior. In the past ten years, only one article in the Academy of Management Review and only two articles in the Academy of Management Journal have dealt with retirement issues. Further, most of the retirement research has been completed by gerontologists who have focused on the nonwork consequences of retirement. Past research has consisted largely of retrospective studies which lack a theoretical foundation. At present, there is no clear understanding of issues such as: the psychological factors which influence the retirement decision, the relative importance of financial resources and health to the retirement decision, and the factors that influence the preparation for retirement.

Developing the literature on the retirement process would aid practitioners in designing retirement programs and would contribute to our theoretical understanding of career transitions. Over the next several decades, the size of the older U.S. population is expected to
increase dramatically. For example, in 1980 there were 25.5 million Americans aged 65 and over. It is estimated that by the year 2000, there will be approximately 30.6 million Americans aged 65 and over. By the year 2050, the number of Americans aged 65 and over is expected to increase to 67 million (Atchley, 1985). As the population ages, there will be an increased demand for retirement information. Individuals may have questions about preparing for retirement and about employment opportunities for older workers. Organizations may want information on the effectiveness of early retirement programs and the best methods to train employees for retirement living. To date, research is unable to provide this information.

Additionally, theoretical developments on the retirement process have not kept pace with the needs of practitioners. For instance, many organizations are now using pre-retirement programs to help workers prepare for retirement. Little research has been done to determine which training programs are the most effective (Sullivan, 1986). Likewise, many organizations are using early retirement incentive plans to reduce the number of layoffs during periods of decline, to remove obsolete employees and to bring new blood into the company. Only one study to date (Howard, 1988) has examined which characteristics distinguish participants
in early retirement incentive programs from nonparticipants. The major questions of 'why do people take early retirement?' and 'do the best or worst employees take early retirement?' still remain unanswered. The theories of the career transitions literature, for example, can be used to help answer questions about early retirement and to help establish a foundation for organizing and integrating retirement research.

As the focus of the career transitions literature is on the psychological factors that influence career decision making, it would add an individual perspective to the outcome oriented study of retirement. For instance, career stage theorists (e.g., Levinson, 1978; Super, 1957) suggest that psychological factors encountered at a stage influence decisions made and actions taken during that stage. While people in one stage (e.g., maintenance) may not be psychologically ready to accept early retirement, people in another stage (e.g., disengagement) may be ready for retirement due to the psychological issues and developmental tasks usually encountered at that stage. Theories of career transition have not yet been applied to research on the retirement process. However, such an application would provide an underlying foundation to the retirement literature so that it is an integrative framework for
storing and testing ideas rather than just a collection of unrelated studies.

In addition to providing a basis for organizational decision making regarding retirement programs, research on the process of retirement could provide a better understanding of career decision making and career development. Hall (1986) notes that one of the major deficiencies of the organizational career literature is the lack of research on the late career stages (See Latack & Dozier, 1986; Slocum, Cron, Hansen & Rawlings, 1985 for exceptions). In general, the career literature focuses on the educational or occupational experiences of individuals making transitions into work careers; little research examines midcareer changes and the transitions out of the work career. Thus, while numerous authors (e.g., Levinson, 1978; Sheehy, 1978; Super, 1957) have hypothesized about the psychological issues and developmental tasks that are probably encountered during the late career stages, few studies have tested these relationships. Often, late career issues, such as retirement, are treated as extensions of the problems of midlife rather than as distinct career concerns (Feldman, 1988). Moreover, little research has tested the relative influence of career stages as compared to such factors as health, financial status and beliefs about career alternatives upon career decision
making. The retirement decision making process provides an opportunity to test specific hypotheses related to late career issues as well as questions that span all of the career stages. For example, Super (1957) hypothesizes that some people do not move through the career stages in a linear manner. Instead, he suggests that some people recycle back to the psychological issues and developmental tasks of earlier stages. Only two studies to date (Morrison's 1974 and 1975 studies as reported by Super, Zelkowitz & Thompson, 1981) have examined the recycling process. More research on recyclers is needed because of the limited and relatively young age range (37-55) of the people in these studies and because recycling was studied as a nonadaptive behavior. Whether recycling does occur, why people recycle and what behaviors are exhibited by recyclers are just three of the many questions about recyclers that need to be examined.

Additionally, the study of the retirement decision could contribute to a better understanding of other types of career choices. For instance, by comparing retirees who chose to leave the workforce to people who retire from one organization and begin work for another organization, insights can be gained about the psychological differences of people choosing work versus nonwork options (e.g., welfare recipients). Thus, an
understanding of both the retirement process and career transitions can be gained by studying how the trigger event of an early retirement incentive plan influences the transitions of people in the late career stages.

In sum, a clearer understanding of why people make certain choices in the late career stages is imperative due to the large number of people entering into these stages. Organizations need to be informed so that they can implement retirement, outplacement and/or retraining policies that are not only profitable, but contribute to the well-being of late career stage workers. To meet the demand for this information, a theoretical foundation for the retirement literature must be developed. Moreover, this theoretically based retirement literature should contribute to a better understanding of career transitions in general. In an effort to help develop such a theoretical foundation, this chapter will: (1) review the different definitions of retirement, (2) examine past research on the retirement decision, and (3) review the career transitions literature and introduce it as the theoretical foundation for future retirement research.

**Definitions of Retirement**

Retirement has been conceptually and operationally defined in a number of different ways (See Beehr, 1986
for a review). For example, Kaplan (1979) defines a retiree "...as an individual who withdraws, temporarily or permanently from an activity, interest or commitment" (as reported by Dennis, 1984, p. 190). Atchley states that a person "...is retired if he or she is employed at a paying job less than full-time, year-round (whatever that may mean in a particular job) and if his or her income comes at least in part from a retirement pension earned through prior years of employment" (1985, p. 182). Retirement has been operationally defined as leaving the workforce (Kingston, 1982), the receipt of a pension (Atchley, 1976; Mitchell & Fields, 1984), by the number of hours of participation in the labor force (Fillenbaum, George & Palmore, 1985), by earnings and years worked (Boskin, 1977), and by individuals' perceptions of whether or not they considered themselves retired (Fillenbaum, et al., 1985; Parnes & Nestel, 1981).

Some researchers (e.g., Palmore, George and Fillenbaum, 1982) argue that the use of different definitions of retirement has resulted in conflicting research findings. Part of the debate over how retirement should be defined stems from the fact that retirement can be viewed from an organizational perspective, as well as from an individual perspective. From an organizational perspective, there is but one
definition of retirement. Retirement occurs when an employee, who is eligible for pension benefits, leaves the firm. Thus, from the organization's viewpoint, retirement is one form of turnover and it makes no difference to the firm whether the employee retires to a life of leisure or pursues full or part-time work with another company.

However, from an individual perspective, there are a number of different transitions people can engage in when retiring. For this dissertation, five types of transitions have been examined (See Figure 1). The types of retirement differ in the number of roles shed during the retirement transition (Louis, 1980). First, retirement can be defined as withdrawal from the labor force. Retirees shed their labor force, professional, organizational and job related roles. Typically, these retirees spend their days engaged in leisure activities or volunteer work. Retirement has traditionally been defined in this manner.

Second, retirement can be defined as an inter-professional/intercompany transition. In this case, employees retire from a company, collect pension benefits, move to a new company, and enter a new profession. These retirees shed their professional, organizational and job related roles. An example of this form of retirement is the retired high school
typing teacher who decides to begin a new career as a secretary.

Third, retirement can be defined as an intra-professional/intercompany transition. Employees retire from an organization and collect pension benefits. They stay in the same profession, but work for another organization. Organizational and job-related roles are shed by these retirees. An example of an intra-professional/intercompany retirement is the retired professor who leaves University X to teach at University Y.

Fourth, retirement can be defined as an inter-professional/intracompany transition. Employees collect pension benefits from the organization, but continue to work for the organization either full or part-time. In this type of transition, the employee sheds both professional and job related roles. The transition made by chief executive officers who relinquish their positions, collect pension benefits, but continue to work for the organization as consultants, is an example of interprofessional/intracompany transition.

Fifth, retirement can be defined as an intra-professional/intracompany transition. Employees collect pension benefits from the organization, but continue to work for the organization, usually at reduced hours. Thus, some job related roles are shed due to the
Decision to Retire

- (1) Leave the Work Force
  - (2) Change to a Different Profession
    - (3) Stay in the Same Profession
      - (3) Stay in the Work Force
        - (4) Change to a Different Profession
          - (5) Stay in Same Profession

**Type of Transition**
(1) Withdrawal Transition
(2) Interprofessional/Intercompany Transition
(3) Intraprofessional/Intercompany Transition
(4) Interprofessional/Intracompany Transition
(5) Intraprofessional/Intracompany Transition

**Figure 1**
Five Types of Transitions
Precipitated by an Option to Retire Early
decrease in working hours and/or responsibilities. An example of this type of transition is salespersons whose territories are reduced at the time they begin to collect pension benefits from their firm.

Determinants of the Retirement Decision

A comprehensive search for studies of the determinants of the retirement decision was completed by: (1) conducting a library computer search using the keyword 'retirement,' (2) performing a manual search for relevant articles referenced in empirical and conceptual pieces on retirement and (3) reviewing the last ten years of the *Academy of Management Journal, Academy of Management Review, The Gerontologist, Journal of Applied Psychology, Journal of Gerontology, Journal of Vocational Behavior, Organizational Behavior and Human Performance* and *Personnel Psychology*. While a search for unpublished studies was not undertaken, unpublished works known to the author were included. A total of twenty-nine empirical studies were found.

A diagram of the variables which have the greatest effect upon the retirement decision is presented in Figure 2. The variables can be classified into three major groups: (1) individual characteristics and attitudes, (2) organizational factors and (3) financial resources. Few conclusions can be made about the
Individual Characteristics and Attitudes

*Education Level (+)

*Attitude Toward Retirement (+)

Chief Satisfaction from work is:

  *Intrinsic (-)

  *Extrinsic (+)

Organizational Factors

*Job Level (-)

*Job Content (-)

Financial Resources

*Expected Retirement Income (+)

*Pension Plan (+)

*Social security (+)

*Assets (+)

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Figure 2
Major Determinants of the Retirement Decision
determinants of retirement due to the small number of studies examining each respective variable and the conflicting results of studies that do examine similar variables.

In general, the following major conclusions can be made based on a review of the studies on the determinants of retirement:


3. A positive attitude toward retirement was found to be positively correlated with retirement (Atchley, 1982; Howard, 1988; Kimmel et al., 1978; Rose & Mogey, 1972).

4. Mixed results were found on the relationship between job satisfaction and retirement propensity (Barfield & Morgan, 1969; Patton, 1977). The mixed results are likely to be caused by the different measures of satisfaction used by the researchers. Researchers using global measures tended to find no significant relationship (i.e., Rose & Mogey, 1972). In contrast, researchers who measured intrinsic and extrinsic satisfaction independently found that if workers' chief satisfaction from work was due to economic rewards, they were more willing to retire than were workers who found their work to be intrinsically satisfying (Draper as reported in Howard, Marshall, Rechnitzer, Cunningham & Donner, 1982; Schmitt et al., 1979).

5. The two studies of the effect of social pressures to retire on the retirement decision reached opposite conclusions. Barfield and Morgan (1969) found that pressure from others had little effect upon people's retire decisions. In contrast, Hwalek and associates (1982) found that the greater the social
pressure upon people to retire, the more likely they are to retire. The differences in results could be caused by a number of factors including the strength and source of the pressure (i.e., from spouse versus friends) and the financial conditions of the organization (i.e., older workers may be told during times of decline and cutbacks that their retirement would save the jobs of younger workers).

6. People in high level jobs with high levels of autonomy and skill variety were less likely to retire than were people in lower level jobs which lacked autonomy and skill variety (Barfield & Morgan, 1969; Eden & Jacobson, 1976; Jacobsohn, 1972; Patton, 1977; Schmitt et al., 1979; Schmitt & McCune, 1981; Sheppard, 1976; Shkop, 1982).

These major conclusions may be helpful to human resource planners in forecasting the number of retirees for a given year and for designing retirement planning programs to match the needs of specific groups based on their retirement reasons. Additionally, these studies have laid the groundwork for future research by providing insight into which variables (e.g., financial resources) are most likely to influence the decision to retire and by indicating which variables should be studied further (e.g., social pressure). For example, this review indicates that financial resources, or the
ability to retire, is a major determinant of retirement behavior. While the ability to retire variable has been researched, the influence of the motivation to retire on retirement behavior has not yet been examined. It is suggested that retirement behavior is a function of both the ability and the motivation to retire. Research examining the relative effect of the ability and motivation to retire needs to be completed.

Building upon the findings of past research and the idea that retirement behavior is a function of both the ability and motivation to retire, this dissertation adds the theoretical foundation of the career transitions literature to the examination of what motivates people to retire. Specifically, Super's Theory of Career Stages in conjunction with the works of Levinson, Hall, Schein and others, will be used to explain why people retire, why people chose one type of retirement transition over another type and the amount of preparation completed by people prior to retirement.

**Appropriateness of Studying Retirement as a Career Transition**

While a number of theories and literatures could be applied to the study of retirement, it is appropriate to study retirement as a career transition for two reasons. First, the career transitions literature
provides a psychological focus based on a person's life experiences. The idea that each transition decision has a meaningful relation to decisions that precede and follow it is emphasized. Therefore, to gain an understanding of a person's retirement transition, one must examine the decision within the context of the person's life structure. Work and nonwork factors, as well as the person's stage of development, are seen as influencing the person's work behaviors and attitudes. Additionally, the relationship between self-concept and work is emphasized in the career transitions literature. A number of researchers (e.g., Friedmann & Havighurst, 1954; Morse & Weiss, 1968; Neff, 1968; Schrecker, 1968) have written on the meaning of work and how work affects the image people have of themselves and others. The connection between people's self-concepts and their work influences transition behavior, and should especially influence the transition from work to traditionally defined retirement.

Second, it is appropriate to study retirement as a career transition as it provides a better understanding of the career choices available. If, for example, retirement was studied from the turnover perspective, all types of retirement, whether one left the work force or engaged in an intercompany transition, would be treated the same. By examining retirement from the
career transition perspective, what retirees do after they retire from the company, and how this transition choice was determined, can be studied.

In conclusion, it is appropriate to study retirement from a career transitions perspective as it allows for the study of retirement from the viewpoint of the individual. The career transition literature not only focuses on the link between work and self-concept, but it also concentrates on the different choices available to people when they retire from an organization. Schein provides an excellent argument for the study of retirement from this perspective with his statement that: "What is, from the point of view of the organization, simply a process of 'turnover' may be from the point of view of the individual, a major transition crisis involving a search for one's occupational niche." (1978, p. 72).

Overview of the Transitions Literature

There are two major themes underlying the transitions literature. First, people's life experiences can be divided into stages. Each stage is characterized by developmental tasks that should be completed at that stage in order for the individual to move to the next stage and to develop as a healthy individual. Second, the career stages are age related.
For instance, Sheehy(1976) suggests that from approximately age 23 to 27, people are in the 'Trying Twenties' life stage. Establishing an identity and cultivating a capacity for intimacy are the developmental tasks a person in this stage faces. Thus, each stage is designated by an approximate age range and the developmental tasks likely to be encountered at that period in life.

Moreover, the literature on transitions has three major focuses: (1) the biosocial life cycle, (2) the stages of the family, and (3) career stages(Schein, 1978). The first focus of the literature is the biosocial life cycle. These theories deal with issues related to physical aging---predictable changes that occur in people's bodies which produce changes such as puberty, adulthood and old age, and 'age grading'---societal and cultural norms of what people should be doing and how they should behave based on their ages(Neugarten, 1968). Major writers in this area include Buehler(1933), Erikson(1959), Levinson(1978), Sheehy(1976; 1981), and Vaillant(1977).

The second major focus of the transitions literature is the stages of the family. These theories deal with issues related to one's parents, spouse and children(Schein, 1978). The emphasis of this focus is the study of dual career couples(Fogarty, Rapport &

The third focus of the transitions literature is on career stages. These theories deal with issues related to establishing and building a career. Writers in this area include Miller and Form (1951), Super (1957), Hall and Nougaim (1968), Schein (1971), Dalton, Thompson and Price (1977).

The principle theoretical basis for this dissertation is Super's Theory of Career Stages. This theory focuses on the developmental tasks that people are likely to encounter in the later career stages. As Super's theory does not address the psychological issues encountered during the respective career stages or the possible effects of the midlife crisis upon career decision making, theories from the biosocial life cycle (e.g., Levinson, 1978) and stages of the family focus (e.g., Schein, 1978) will be used to supplement his work.

Super's Theory of Career Stages

There are two major themes underlying Donald Super's (1957) Theory of Career Stages. First, Super proposes that people implement their self-concepts by choosing occupations which they believe will permit self-expression. Most of the research (See Kidd as reported by Super, 1988; LoCascio, 1974 for exceptions)
completed on this aspect of Super's theory strongly supports the idea that the self-concept is implemented through a career (For a review, see Osipow, 1983). Second, the process of choosing an occupation which will allow for the expression of one's self-concept, occurs over time. People make a series of related decisions which culminate in the selection of a series of occupations. This process of implementing the self-concept through vocational choices can be summed up in a series of career stages and substages. Each stage is characterized by the developmental tasks that are most frequently encountered at certain ages. Thus, each stage is characterized by the cluster of developmental tasks associated with it and the typical age at which people go through the stage. However, it should be noted that the ages associated with each stage are only approximate due to variations in individual maturation rates.

Super has identified the four career stages of exploration, establishment, maintenance and disengagement. The exploration career stage typically extends from age 15 to 25. During this period, people engage in self-examination and consider their occupational alternatives. Individuals crystalize their occupational preferences, specify what particular job or jobs they are most committed to pursuing and implement
plans to obtain their chosen job objective (Super & Thompson, 1981; Super et al., 1981). The psychological issues faced in this period include the need to search for and discover one's own values, interests and purpose in life (Erikson, 1959), the need to develop a realistic self-assessment of one's abilities, the need to overcome the insecurity of inexperience and develop self-confidence, the need to learn to get along with others in the work setting and the need to balance the desire for total independence with the desire for emotional support (Feldman, 1988).

In the establishment career stage, people try to make a place for themselves in their chosen occupation. Security is their objective. Many people in this stage long for more challenge and responsibility in their jobs (Super & Thompson, 1981; Super, et al., 1981). In this stage, people face the psychological tasks of dealing with feelings of failure, deciding how professionally and organizationally committed they will be, balancing their own needs with those of another person in an intimate relationship, making commitments to a spouse about life style, family, values and child rearing, and adjusting to the emotional demands of parenthood (Feldman, 1988). This stage typically extends from age 25 to 45 (Super & Thompson, 1981).
In the maintenance career stage (from age 45 to 65) people attempt to hold on to their positions, keep up to date on the newest developments in their fields, try to break new ground and to do things differently (Super, et al., 1981). Dealing with the competitiveness and aggression of younger workers, learning to substitute wisdom-based experience for immediate technical skills, becoming primarily concerned with the organization's welfare rather than one's own career, handling highly political or important decisions without becoming emotionally upset, and dealing with feelings of loss as children leave the nest and parents die, are all psychological issues which must be dealt with in this stage (Feldman, 1988).

The final career stage is disengagement. This stage extends from age 60 on. During this period, people tend to slow down, plan for retirement and eventually retire to leisure activities (Super et al., 1981). People in this stage need to find nonwork sources of life satisfaction. They need to come to terms with the choices they have made in their lives. People who retire from the work force, need to maintain a sense of self-worth (Feldman, 1988). Super's career stages and substages are summarized in Table 1.
Table 1
Super's Career Stages and Substages
(Feldman, 1988; Super & Thompson, 1981)

EXPLORATION (age 15-25)

Substages and Associated Developmental Tasks

1. Crystallization—In order to meet the expectations of society, people develop clear ideas of specific occupations that are appropriate for them.
2. Specification—General preferences become more specific. People are expected to act upon and pursue their specific preferences.
3. Implementation—Plans are made and carried out to obtain chosen objectives.

Psychological Issues

1. Need to search for and discover one's interests, values and purpose in life.
2. Need to develop a realistic self-assessment of one's abilities.
3. Need to overcome the insecurity of inexperience and develop self-confidence.
4. Need to learn to get along with others in the work setting.
5. Need to balance the desire for total independence and the desire for emotional support.

ESTABLISHMENT (age 25-45)

Substages and Associated Developmental Tasks

1. Stabilizing—People are expected to settle down, use abilities, pursue interests, have an appropriate lifestyle and support themselves and their families.
2. Consolidating—People are concerned about getting established in their occupation and job.
3. Advancement—Most people are attempting to move to more financially profitable and more challenging levels of responsibility.
Table 1, continued
Super's Career Stages and Substages

ESTABLISHMENT

Psychological Issues

1. Deciding on the level of professional and organizational commitment.
2. Dealing with feelings of failure on first independent projects.
3. Balancing one's own needs and the needs of another person.
4. Making commitments to spouse and adjusting to the demands of parenthood.

MAINTENANCE (age 45-60)

Substages and Associated Developmental Tasks

1. Holding—Maintaining one's position in the face of competition and change.
2. Updating—Keeping up-to-date with a changing field in order to avoid stagnation.
3. Innovating—Fulfilling the need to do something different or at least to do things differently.

Psychological Issues

1. Dealing with competitiveness and aggression of younger workers.
2. Learning to substitute wisdom-based experience for immediate technical skills.
3. Placing the concerns of the company ahead of one's own career concerns.
4. Handling political and important decisions without becoming emotionally upset.
5. Dealing with feelings of loss.
Table 1, continued
Super's Career Stages and Substages

DISENGAGEMENT (age 60 on)

Substages and Associated Developmental Tasks

1. Decelerating--As people get older, they may feel the need to reduce their work pace. They may begin to turn work activities over to younger people and may take on new activities with greater selectivity.

2. Retirement Planning--In anticipation of retirement, people become actively concerned with preparing to retire.

3. Retirement Living--When people give up their paid job, they become concerned with their nonwork/leisure roles.

Psychological Issues

1. Need to find new sources of life satisfaction outside the job.

2. Need to maintain self-worth when leave the workforce.
Recycling

Progression through the career stages is not always stable and linear. Recycling can occur when people face failure, crisis or change in their occupational or personal life. When people begin to look for new occupations and environments, they return to the concerns of the earlier stages of exploration and establishment. The most probable time when people will recycle is when they experience a midlife crisis (Super, et al., 1981). Midlife is a period in which people question their lives and search for answers. Some people successfully face the issues of midlife and pass through the maintenance stage to the disengagement stage. Others have problems dealing with midlife and midcareer issues and go through a time of crisis.

The six issues (Feldman, 1988; Schein, 1978) that typically confront people when facing a midlife or midcareer crisis, and could precipitate recycling, are:

1. **The Dream.** People in their twenties usually develop ideas of what their life will be like when they get older. Goals are set and plans are made. At midlife, people tend to reappraise their lives to see if there is a difference between their goals and their accomplishments. At this time people realize what goals they have achieved and recognize that some goals are unattainable (Levinson, 1979).
(2) **The Iceman Cometh.** At midlife people become aware of their advancing age and eventual death. Changes related to physical aging become apparent. The person may experience a serious illness or suffer from a permanent impairment at this time. Psychological limitations are also recognized. Additionally, people become more sensitive to the misfortunes of others and note that their friends are dying, being involved in more accidents, and suffering from such problems as depression, alcoholism, and job failures (Levinson 1978; Schein, 1978).

(3) **Other Voices in Other Rooms.** During midlife, people often re-evaluate their commitments to work, family and to other groups. In the past, choices were made about what aspects of life were to be given top priority and what aspects would receive less attention. At midlife, people begin to regret some of these choices and grieve for opportunities lost. There is a rekindling of adolescent impulses and conflicts as people try to recapture these lost opportunities (Schein, 1978). Midlifers may feel the need to make their remaining years worthwhile by passing on a legacy to future generations. Likewise, people need to come to terms with how they have hurt family, friends and rivals to get to where they are now (Levinson 1978).
(4) **The Heavy Burden of Our Masks.** As people progress through the exploration, establishment and maintenance career stages, they develop an image of themselves. Likewise, family and friends develop images of what others are like and what they do and do not do. At midlife, people often wish to change and try new things. However, people may feel trapped by the expectations of others and themselves. Thus, people are trapped by the 'masks' or expectations about the proper attitudes and behaviors they should exhibit (LeShan, 1973).

(5) **Changes in Family Relations.** This is a period of marked changes in family situations. Often children are leaving the nest and parents are becoming dependent or are dying (Levinson, 1978; Schein, 1978). There is an increase in the search for intimacy; one's relationship with one's spouse changes as the children are no longer the major focus of the marriage (Lowenthal, Thurnherm & Chiriboga, 1975). Additionally, one's midlife crisis could occur at the same time one's child is going through the exploration stage. Children in the exploration stage are trying to discover who they are and are questioning the values of society and their parents. Parents experiencing a midlife crisis may be especially disturbed by their children's questioning of accepted values or may be spurred by their children's
questions to re-evaluate their own life style (Levinson, 1978).

(6) **Job Concerns.** Midlife is also a time when people need to deal with job related issues. During this time people may feel a sense of work obsolescence. There may be an increased concern for job security and a perceived constriction of opportunities; plateauing is likely to occur (Schein, 1978). Mastery of one's job could reduce job challenge. There may be little or no feedback and recognition for one's work (Hall, 1986). Stress may increase as people are asked to take on mentoring responsibilities. People may not want the responsibilities associated with being a mentor or may not know how to be a mentor (Hall, 1976; Schein, 1978). Satisfaction and commitment to one's career often decreases at midlife (Rush, Peacock & Milkovich, 1980). Many midlifers change jobs during this time in a quest for more satisfying and challenging work.

It should be noted that not everyone goes through a midlife crisis (Lawrence, 1980). Many people go through a stable progression from the establishment to the maintenance to the disengagement stage. However, if a midlife crisis does occur, people may stagnate or they may recycle and grow. Midlifers who are recycling would return to the concerns and tasks of the exploration and establishment stages. Thus, when researching an older
population (e.g., age 50 and over) it is assumed that anyone in the exploration or establishment career stage is recycling and not in the stage for the first time. When this is the case, the exploration and establishment stages can be combined and renamed the recycling career stage.

Research on Super's Theory of Career Stages

The research that has been completed on Super's Theory of Career Stages has focused on three areas: (1) vocational maturity, (2) the relationship between career stages and work attitudes and behaviors and (3) the measurement of career stages.

Vocational Maturity

Vocational or career maturity is the normative assessment of the rate and level of a person's career development. The greater the congruence between a person's career stage and the expected vocational behavior for the person's age, the more vocationally mature the person is said to be (Osipow, 1983). Most of the research that has been completed on Super's concept of vocational maturity was done by Super and his associates as part of the Career Pattern Study. The Career Pattern Study began as a test of the vocational maturity of ninth grade boys in Middletown, New York.
The vocational maturity of the boys was traced over a twenty-year period. The following are the major findings of the research which has been completed by Super and his associates:

1. Vocational maturity in ninth grade boys is related to their degree of intellectual and cultural stimulation, the degree to which they are intellectually able to respond to that stimulation, their aspirations to higher socioeconomic levels and their achievement ability (Super & Overstreet, 1960). Also, while the impact of socioeconomic status upon vocational maturity is greater in the last year of high school than in earlier years, its effect is not significant (Jordaan & Heyde as reported in Super, 1988; Super, 1986).

2. For the ninth grade boys, age was of less importance to vocational maturity than was intelligence (Super & Overstreet, 1960). Research by Crites (1965) and Wurtz (1969) support the finding that mental age is a better predictor of vocational maturity than is physical age.

3. Between the ages of 18 and 25, the average student in the Career Pattern Study had changed jobs, occupation or employer six times. Eight-five percent of these changes were classified as floundering behavior. Floundering behavior would be typical behavior of people in the exploration stage. By age 25, 80% of the 'boys'
from the Career Pattern Study had engaged in stabilizing behavior (Super & Jordaan, 1982; Super, Kowalski & Gotkin, 1967). This research provides support for Super's theory as the boys left the exploration stage and entered into the establishment stage as predicted.

4. Vocational maturity, coupled with measures of student achievement and status, are good predictors of such outcomes as career and occupational satisfaction (Super et al., 1967; Super & Jordaan, 1982). While the majority of the research on vocational maturity has been completed by Super and his associates, other researchers have reported the following findings:

1. Gibbons and Lohnes (as reported in Super, 1988) found that awareness of interests and values related to educational and vocational decisions increases during the period from the eight to the tenth grade.

Similarly, Tilden (as reported by Super & Hall, 1978) found that maturity scores tend to increase continuously by grade level in high school. Vocational maturity does not however increase with college grade level, indicating that vocational maturation and the decision process of college and high school students are dissimilar (Osipow, 1983).

2. Dickey (1975) found that work-oriented women have greater vocational maturity than do homemakers.

Likewise, Putnam and Hansen (as reported in Osipow, 1983)
found that high school women who hold traditional views about the role of women have lower levels of vocational maturity than do women with less traditional views. Super (1984) suggests that it is the salience of the work role, not gender, that determines vocational maturity. Research by Richardson (as reported by Super & Hall, 1978), Crites (1978) and Super and associates (1981) found slight gender differences in vocational maturity scores, with women, as a group, tending to score higher than men.

In sum, research has found that mental age is a better indicator of vocational maturity than is physical age, gender or socioeconomic status. Additionally, support was found for Super's contention that people progress from the exploration stage to the establishment stage.

Work Attitudes and Behaviors

Research indicates that career stages do affect values, needs, job attitudes, behaviors and how people describe their work environment. Findings from studies of career stage relationships are often difficult to compare as most of the authors use different operational measures of career stages (e.g., age, professional tenure, organizational tenure). Additionally, many of the authors (e.g., Slocum & Cron, 1985; Alder & Aranya,
1984; Rabinowitcz & Hall, 1981; Stumpf & Rabinowitz, 1981; Veiga, 1983; Mount, 1984; Cashman & Brooks, 1984; Raelin, 1984) condense the career concept into the three stages of early, middle and late, thus combining the exploration stage with parts of the establishment stage, part of the establishment stage with the maintenance stage, and part of the maintenance stage with the disengagement stage.

The following is a summary of the research that has been completed on the relationship between career stages and work attitudes and behaviors:

1. Blackburn and Fox (1983) in their study of 24 physicians, found that values differ by career stage. Physicians begin their careers with higher than average value salience and the importance of many values (e.g., value of being associated with a university) declines with age. However, physicians become more concerned about status and prestige as they get older.

2. Adler and Aranga (1984) found that social, esteem, autonomy and self-actualization needs are stronger at each subsequent career stage until the pre-retirement stage. However, security needs are increasingly stronger across all the career stages. Similar findings were reported by Hall (1979), Hall and Mansfield (1975), Saleh (1964), Holley, Field and Holley (as reported in Osipow, 1983), and Rhodes (1983).
3. Cron & Slocum(1986) found that feelings of psychological success, job involvement and work satisfaction increased across the exploration, establishment and maintenance stages and then returned to establishment stage level of these factors for people in the disengagement stage. In contrast, job challenge increased with career stage. Raelin's(1984) study of career stages and job involvement found a curvilinear relationship, with the middle age group(ages 34-44) having a lower level of job involvement than either the early(ages 25-34) or late(ages 45-65) groups. Zelkowitz(as reported in Super et al., 1981) found that career stage and job and career satisfaction had a curvilinear relationship which peaked in the establishment stage.

4. Slocum and Cron(1985) reported that people have a greater propensity to leave the firm in the trial(Super's exploration stage) as compared to the stabilization(Super's establishment stage) and maintenance stages. People in the stabilization and maintenance stages were more satisfied with their work than were people in the trial stage. No differences in feelings of psychological success, job challenge, satisfaction with supervision, satisfaction with coworkers or satisfaction with pay were found across the stages. In contrast, Mount(1984) found that managers in
the establishment stage (i.e., less than or equal to two years in the profession) were more satisfied with supervision, coworkers, pay, company practices and career development than were managers in the advancement (i.e., greater than two years but less than ten years in the profession) and maintenance (i.e., greater than ten years in the profession) stages. No differences in satisfaction with pay were found across stages.

5. Rabinowitz and Hall (1981) suggest that career stage moderates the relationship between job involvement and situation, individual difference and outcome measures. Specifically, people in the early career stage were more strongly affected by job characteristics, while people in the midcareer stage were more affected by individual difference variables.

In conclusion, Super contends that each career stage is characterized by certain concerns and developmental tasks that an individual in that stage must face. Thus, the concerns one is facing and the tasks one is supposed to complete should influence the career choices made. Most of the research on Super's theory has focused on the exploration and establishment career stages (for exceptions see Morrison, 1974; Rush et al., 1980). Research has shown that career stages do affect people's values, needs, attitudes and behaviors.
While little of this research has been replicated with people in the later career stages, Super's work suggests that behaviors and attitudes related to the retirement decision can be explained by the career stage a person is in at the time the decision is made.

**Measurement of Career Stages**

Research that has been completed on career stages has produced some conflicting and inconclusive findings. One of the reasons for the differences in findings stems from the different definitions of career stages used by researchers (Mount, 1984). For example, Morrow and McElroy (in press) reported that findings related to organizational commitment and intent to remain were influenced by how career stage was measured; in contrast, work ethic endorsement, job satisfaction and personal characteristics were relatively unaffected by the measurement used.

To test the effects of different measures of career stages upon findings, Chao (1986) compared three methods of measuring career stage—age, career tenure and organizational tenure. Chao found that the three methods were not highly correlated. Of the three, Chao argues that age would be the best method of assigning people to career stages as age accounted for the most variance. The use of age to define career stages is
more accurate than the organizational tenure method, as organizational tenure may be confused with division, plant or office tenure. Likewise, career tenure could be influenced by the person's definition of career (Chao, 1986).

While age is the most commonly used measure of career stage, it is questionable whether a person's age accurately reflects career stage. To test whether career stages are age-linked, Rush, Peacock and Milkovich (1980) asked 759 managerial, professional and technical employees whether they had passed through, were still in, or had not yet entered each stage, as measured by short vignettes. Neither the total sample or any of the subsamples (e.g., gender) showed a significant age-stage relationship. Rush and associates argue that is not appropriate to think that career stages are age linked. Due to individual difference in maturation and situational factors, Rush and associates believe it may be more appropriate to think in terms of a 'career clock.' The career clock would begin at different points for different individuals based on their backgrounds and experience. Support for the career clock was provided by Blackburn's and Fox's (1983) study of physicians. Blackburn and Fox found that while physicians do progress through the sequence of stages described by Levinson, that they do so at a time lag of
approximately five years. Additionally, Super, Kowalski and Gotkin (1967) found that exploratory behavior, typical of the first career stage, was exhibited not only by people in their early twenties but also by people in their middle and late twenties and even by some people older than thirty. Phillips (1982) and Sugalski and Greenhaus (1986) reported similar findings. Hall's (1986) study of plateaued engineers also supports the idea of the career clock. Hall found that midcareer occurs at different ages for different people. The plateaued engineers studied were at the same job level but ranged in age from 20 to 60 years old.

Chao (1986) suggests that a better understanding of career stages may be obtained if time-based criteria were avoided. Instead, she argues for the use of instruments that directly measure the attitudes and behaviors which are most characteristics of the respective career stages. The Career Concerns Inventory, (CCI), developed by Super and his associates, measures career stage by examining individuals' stage-related attitudes and behaviors. The CCI measures the four major career stages defined by Super. The CCI has been subjected to numerous validity and reliability tests in a variety of occupational settings (See Super et al., 1981 for a review).
Hypotheses

Little research has focused on the relationship between the later career stages and people's attitudes and behaviors. Research that has been completed has focused on the earlier career stages of exploration and establishment. The findings from the research on the exploration and establishment stages suggest that people's career stages influence their attitudes and behaviors (Super and Jordaan, 1982). The hypotheses which follow, examine the relationships between the late career stages of recycling, maintenance and disengagement with career oriented attitudes and behaviors. Furthermore, the focus of this dissertation is on the factors which influence the motivation, rather than the ability, to retire.

The first hypothesis focuses on the relationship between career stage and the decision to retire from the university. People in the disengagement career stage are psychologically and physically withdrawing from the workforce. They are beginning to reduce their work load; they are not taking on any new projects. Disengagers are beginning to think and plan for retirement. They are more likely to retire from the university than to remain with their present job. Similar to people in the disengagement stage, people in the recycling stage are likely to retire. They are
ready for a career change. They are re-exploring who they are and the type of work they wish to do. In contrast, people in the maintenance stage are more likely to remain in their current job than they are to retire. They are not ready to leave the workforce. Their major objective is security. They wish to maintain their present position.

Based on the preceding discussion, the following hypothesis is proposed:

H1: When groups are compared in terms of their decision to retire, people in the disengagement and recycling stages are more likely to retire than are people in the maintenance stage.

The second hypothesis examines the relationship between career stage and the decision as to which university plan to retire under. In 1987 and 1988 faculty members could retire under one of four available retirement plans. First, they could retire under the retirement incentive plan. The incentive plan required that: (a) the person be at least 50 years old, (b) the person must have had a certain number of years of service credit, the requirements varying with age(e.g., 5 years of credit for those 60 years of age and over, 25 years of credit for those 55 years of age and over), (c) the university would buy a maximum of 5 years of credit, (d) the person could not work for the university after retirement. The incentive plan was offered only for a two year period.
Second, faculty members could retire under the service retirement plan. Faculty members could retire at any age if they had 30 years of service credit, could retire at age 55 with 25 years of service credit or could retire at age 60 with 5 years of service credit. Faculty retiring under this plan could work one quarter per year after retiring if they were needed by their department. The university considered both the incentive and service plan to be early retirement options.

Third, faculty members could retire under the disability retirement plan. To be eligible to retire under this plan one must be under the age of 60, have 5 or more years of service credit and be disabled for teaching service.

Fourth, faculty members must retire no later than the end of their appointment year in which they reach age 70. This is the university's mandatory retirement policy (STRS, 1987).

For those people eligible for the incentive plan, people in the disengagement and recycling stages are more likely to retire under the incentive plan whereas people in the maintenance stage are more likely to choose either the service, mandatory or disability retirement plan. People in the disengagement stage have thought about and have begun to plan for retirement.
The offering of the incentive plan may have caused people in the early substages of disengagement to move up their retirement date as the plan may have made retiring earlier more profitable. Likewise, disengagers planning to retire under the service option may have judged the incentive plan to be more profitable.

Besides people in the disengagement stage, people in the recycling stage are likely to retire under the incentive plan. Recyclers have returned to the concerns of the exploration and establishment stages. They probably choose to retire under the incentive plan because the financially attractive scheme allows them to leave the university to re-examine their values, interests and purposes in life. The incentive option gives them the chance to make a change in their career.

In contrast, people in the maintenance stage are not likely to accept the retirement incentive offer. Their major concern is stabilizing their present position. Accepting the incentive plan would force them to leave the organization in the next two years. Maintainers are not psychologically ready to leave the firm; they want to maintain the status quo. Additionally, maintainers are likely to choose to retire under the service plan as it, unlike the incentive plan, allows them to work for the university part-time after retirement. Working part-time for the university would
reduce the amount of change experienced by the retiring maintainer.

H2: When groups are compared in terms of choosing a retirement plan, people in the disengagement and recycling stages are more likely to choose to retire under the incentive plan than are people in the maintenance stage.

Hypothesis Three focuses on the type of retirement transition people make when they retire from a firm. It is proposed that people in the disengagement stage are more likely than people in the other two stages to leave the workforce. People in the disengagement stage have come to the end of their work career. They realize that satisfaction can be found from other sources besides work. They wish to spend time engaging in nonwork activities.

In comparison, people in the recycling stage are more likely to make a career change. They are re-examining themselves and their options. They may wish to establish themselves in a new career or change the type of work they do.

In contrast, people in the maintenance stage are likely to leave the organization and go to work for another organization doing basically the same work they are doing now. They want to maintain their position in the field. They have probably decided to leave the university because it is financially attractive to do so.
Based upon the preceding discussion, the following hypothesis is proposed:

H3: When groups are compared in terms of the type of retirement transition chosen: (a) people in the disengagement career stage are more likely to leave the workforce than are people in the maintenance and recycling career stages, (b) people in the recycling career stage are more likely to do work different from the work they are doing now than are people in the disengagement and maintenance career stages, and (c) people in the maintenance career stage are more likely to do work similar to the work they do now, but for another organization, than are people in the disengagement and recycling career stages.

Just as the type of role transition is suggested to be related to career stage, the intensity of the role transition is also thought to be stage related. Hypothesis Four focuses on the intensity of the retirement transition. As illustrated in Figure 1 on page 12, there are five types of transitions that are precipitated by the university's offering of the incentive retirement plan. These transitions differ in the number of roles shed during the transition. The more elements in the new situation differ from the elements in the old situation, the more the individual making the transition has to cope with and the greater the change experienced(Louis, 1980). It should be noted that individual differences can modify the intensity of change(Scholossberg, 1980).

Following from Latack(1980), it is suggested that transitions can be objectively rated in terms of
intensity. For example, a change in a job alone would be less of an intense transition than changing a job and an organization. Additionally, based on the job loss literature (e.g., Leana & Ivancevich, 1987; Latack & Dozier, 1986; DeFrank & Ivancevich, 1985) and the research on the consequences of retirement (e.g., Atchley, 1985; Sheppard, 1976) it is argued that leaving the workforce would be the most intense of the transitions being studied in this dissertation. For example, retirement was rated by Ruch and Holmes (1971) as a stressful event requiring much adjustment. Moreover, work is often seen as a source of identity and status (Friedmann & Havighurst, 1954) with people often saying "My job is what I am". The importance of work to people has been measured using some form of the lottery question: "Imagine that you won the lottery and could live comfortably for the rest of your life without working, do you think you would work anyway?" Most workers (80-90%) say they would continue working even without the economic need (Harpaz, 1985).

H4: When groups are compared in terms of the intensity of their role transitions, people in the disengagement stage are more likely to have the highest level of role transition intensity, people in the maintenance stage are more likely to have the lowest level of role transition intensity, and people in the recycling stage are more likely to have a level of role transition intensity between the other groups.

As noted earlier, research has found that as students progress from ninth to twelfth grade and come
closer to beginning their first job or selecting a college major, they are better able to specify their career choice (Jepsen, 1975; Madaus & O'Hara, 1967; Super et al., 1967). Likewise, it is suggested that as people come closer to retirement, they are more likely to prepare for it. Recyclers, just like the twenty-year olds in the exploration and establishment stage, are more interested in building their careers than thinking about ending their work lives. As people pass into the maintenance stage and as midlife issues become important, more thought is probably given to planning for the future, including planning for retirement. Finally, as people enter the disengagement stage and begin to physically and psychologically reduce their work pace, retirement is no longer a remote future goal but a very near and very real possibility. Because people have a tendency to put off plans on major issues until those issues are impending (Simon, 1977) the level of preparation for retirement will be related to how close people are to retirement. Therefore, it is hypothesized that:

H5: People in the disengagement career stage are more likely to have completed the highest level of retirement preparation, people in the recycling career stage are more likely to completed the lowest level of retirement preparation and people in the maintenance career stage are likely to have completed a level of retirement preparation somewhere between the levels of the other two groups.
The theories of life and career stages suggest that there is a relationship between stage and age (e.g., Levinson, 1978; Super, 1957). Many researchers have used age-groups as a measure of career stage (For a review see Morrow & McElroy, in press). Work by Chao (1986) and others (e.g., Morrow & McElroy, in press; Rush et al., 1980) questions the use of age as a measure of career stage. Instead, it is suggested that psychological scales, such as Super's Career Concerns Inventory, are a more appropriate way to measure career stage (Chao, 1986). To test this assumption, age was compared to the Career Concerns Inventory to determine which measure was the most valid.

Based on the work of Chao (1986) and others (e.g., Rush et al., 1980), it is proposed that:

H6: The Career Concerns Inventory is a more valid measure of career stage than is age.

The hypotheses to be examined are summarized in Table 2.
Table 2

Hypotheses to be Examined

H1: When groups are compared in terms of their decision to retire, people in the disengagement and recycling stages are more likely to retire than are people in the maintenance stage.

H2: When groups are compared in terms of choosing a retirement plan, people in the disengagement and recycling stages are more likely to choose to retire under the incentive plan than are people in the maintenance stage.

H3: When groups are compared in terms of the type of retirement transition chosen: (a) people in the disengagement career stage are more likely to leave the workforce than are people in the maintenance and recycling career stages, (b) people in the recycling career stage are more likely to do work different from the work they are doing now than are people in the disengagement and maintenance career stages, and (c) people in the maintenance career stage are more likely to do work similar to the work they do now, but for another organization, than are people in the disengagement and recycling career stages.

H4: When groups are compared in terms of the intensity of their role transitions, people in the disengagement stage are more likely to have the highest level of role transition intensity, people in the maintenance stage are more likely to have the lowest level of role transition intensity, and people in the recycling stage are more likely to have a level of role transition intensity between the other groups.

H5: People in the disengagement career stage are more likely to have completed the highest level of retirement preparation, people in the recycling career stage are more likely to completed the lowest level of retirement preparation and people in the maintenance career stage are likely to have completed a level of retirement preparation somewhere between the levels of the other two groups.

H6: The Career Concerns Inventory is a more valid measure of career stage than is age.
Footnotes

1 While it is true that older people (i.e., age 50 and over) are more likely to retire than younger people (i.e., age 20-30) the research correlating age and retirement plans has tended to focus on older groups. People within the older age groups were examined and no significant relationship was found between age and plans to retire. There are a number of possible explanations for these nonsignificant findings, including the idea that some people just don't want or plan to retire, no matter their age. Additionally, career stage, rather than age, may be a greater influence upon retirement plans. For example, a 60 year old person in the maintenance stage may be less likely to retire than a 50 year old in the recycling stage.
CHAPTER II
DESIGN AND METHODOLOGY

As detailed in Chapter I, this study examines the relationship between career stage and outcomes such as the decision to retire, type of retirement transition and preparation for retirement. As this study researches naturally occurring phenomena (i.e., career stages) that cannot be experimentally manipulated, a field survey is the appropriate research design to use. Field surveys offer many advantages to the researcher including high realism, low intrusiveness, social significance and strength of variables (Bouchard, 1983; Kerlinger, 1973). While field surveys have many advantages, a major disadvantage of this research design is its lack of control over extraneous variables. However, the influence of these extraneous variables can be controlled by measuring the variables and statistically removing their effects (Stone, 1978).

Sample

Faculty members at a large midwestern university who were eligible to retire were surveyed. A list of the faculty age 50 and over was obtained from the university's Office of
Benefits Administration. A closed-ended questionnaire (See Appendix A, p.117) was sent via campus mail to the faculty members. Two weeks after the mailing, follow-up telephone calls were made in an effort to increase response rate. Faculty members who were not eligible to retire within the next two years (i.e., in 1987 or 1988) were asked to indicate their status either by calling the researcher or by indicating their ineligibility on the survey and returning it via campus mail. Two hundred and forty-five (51%) of the faculty who were eligible to retire in 1987 or 1988 returned the survey. Seventy-eight (30%) of these faculty members notified personnel of their intention to retire under the incentive plan.

Variables and Measures

The following are the variables which were used to test the hypotheses and to examine exploratory issues:

(1) **Career Stage.** Career stage was measured by the Career Concerns Inventory, Adult Form (Super et al., 1981). The Career Concerns Inventory, (CCI), is a 60 item scale based on Super's Theory of Career Stages. Items relate to the concerns of the exploration, establishment, maintenance and disengagement career stages. Due to the fact that the youngest member of the sample was age 50, it was assumed that anyone in the exploration or establishment career stage had recycled to that stage and was not in the stage for the first
time. Therefore, the five stages were collapsed into the recycling stage (composed of the exploration and establishment stages), the maintenance stage and the disengagement stage. Forty-five of the sixty items in the CCI were used; 15 items were used to measure each of the three stages.

(2) Decision to Retire. Subjects were asked when they intend to retire. People who plan to retire in 1987 or 1988 were coded as 'yes' to indicate their intention to retire in the next two years. People who plan to retire in 1989 or later were coded as 'no' as their retirement is not imminent.

(3) Choice of Retirement Plan. Subjects were asked which of the four university retirement plans (incentive, service, disability and mandatory) they intend to retire under.

(4) Eligibility for the Incentive Plan. Subjects were asked if they were eligible to retire in 1987 or 1988 under the university's incentive plan.

(5) Intensity of Retirement Transition. The five transition options (leave the work force, interprofessional/intercompany transition, interprofessional/intracompany transition, intraprofessional/intercompany transition, intraprofessional/intracompany transition) open to faculty members upon their retirement from the university were measured by two closed-ended questions. One question focused on whether the person intended to stay with the university or change organizations upon retirement from their present position. The second question asked whether the person plans
to do work similar or dissimilar to the work they do now. Both questions contained the options: "I plan to leave the workforce" and "I haven't made any plans yet."

Level of transition intensity was measured objectively following from Latack(1984). Transitions which involved shedding more roles were given higher intensity ratings(Hall, 1980). Table 3 represents the operationalization of the transition intensity measure.

(6) Type of Retirement Transition. To examine the specific nature of the transitions subjects plan to make when they retire from their present university position, subjects were asked whether they plan to do work similar or dissimilar to the work they now do, or whether they plan to leave the workforce.

(7) Level of Retirement Preparation. Six items were used to measure how much preparation an individual has done for retirement. The activities listed in the six items were based on the typical activities people go through when planning for retirement and upon the content of retirement preparation programs(Sullivan, 1986). Preparation activities ranged from searching for and obtaining an after-retirement job to the planning of leisure activities.

(8) Age. Age was determined from personnel records supplied by the university's Office of Benefits Administration.
Table 3
Measure of Intensity of Change in a Retirement Transition

<table>
<thead>
<tr>
<th>Transition</th>
<th>Roles Shed in Transition</th>
<th>Scale Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>leaving the workforce</td>
<td>workforce + professional + organizational + job</td>
<td>4</td>
</tr>
<tr>
<td>interprofessional/intercompany</td>
<td>professional + organizational + job</td>
<td>3</td>
</tr>
<tr>
<td>interprofessional/intracompany</td>
<td>professional +</td>
<td>2</td>
</tr>
<tr>
<td>intraprofessional/intercompany</td>
<td>organizational + job</td>
<td>1</td>
</tr>
<tr>
<td>intraprofessional/intracompany</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>
(9) **Health.** Health was based on subjects' self-ratings. Subjects were asked to rate their health on a five point scale ranging from poor to excellent. Additionally, subjects were asked how often in the past year they had to change plans or miss work because of their health (Andrew & Withey, 1976; Campbell, Converse & Rodgers, 1976).

(10) **Financial Ability to Retire.** The rating of the subjects' perception of their ability to retire was based on their answer to the following question: "To what extent do you feel you have adequate financial resources to retire within the next two years?" The five point response scale ranged from "not at all" to "very much."

(11) **Change in Income upon Retirement.** Subjects were asked if their income would increase, decrease or stay the same once they retired.

(12) **Marketability.** Subjects' marketability was measured by the question: "If you decided to leave your position within the next two years, how do you rate your chance of finding a position as good as the one you have now?" The five point response scale ranged from "poor" to "excellent."

(13) **Attitude Toward Retirement.** One question was used to measure whether subjects had a positive or negative attitude toward retirement. The five point
response scale ranged from "very negative" to "very positive."

(14) Anticipated Amount of Change in Life Due to Retirement. The two questions used to judge the amount of change subjects' perceived would be caused by their retirement are: "To what extent do you think retirement will cause changes in your life?" and "After you have retired, to what extent do you think your life will be the same as it is now?" The five point response scale ranged from "not at all" to "very much."

(15) Pressure to Retire. Subjects were asked: "To what extent do you feel pressure from others (e.g., family, friends) to retire soon?" The five point response scale ranged from "not at all" to "very much."

(16) Job Involvement. Job involvement was measured using Kanungo's ten item scale. Kanungo's scale is a refinement of the Lodahl & Kejner scale; however, the Kanungo scale does not suffer from the construct validity problems which plague the Lodahl and Kejner measure (Kanungo, 1982).

(17) Work Involvement. Work involvement or identification with work in general, was measured using Kanungo's (1982) six item scale.

(18) Organizational Commitment. Organizational commitment as measured by the Organizational Commitment Questionnaire, (OCQ), short form (Mowday, Porter &
(19) **Professional Commitment.** Following from Aranya, Pollock and Amernic(1981), professional commitment was measured by replacing the word "organization" in OCQ with the word "professionalism."

(20) **Job Satisfaction.** Job satisfaction was measured by two global statements: "How satisfied are you with your job?" and the extent of agreement with the statement "I am happy with my job."

(21) **Organizational Satisfaction.** Satisfaction with the employing organization was measured by responses to two global statements: "How satisfied are you working for the university?" and the extent of agreement with the statement "I am happy working for the university."

(22) **Nonwork Satisfaction.** Satisfaction with the nonwork aspects of life was measured by two global statements: "How satisfied are you with the nonwork aspects of your life" and the extent of agreement with the statement "I am happy with the 'off the job' aspects of my life"(Andersens & Withney, 1976; Campbell, Converse & Rodgers, 1976).

(23) **Life Satisfaction.** Life satisfaction was measured by two global statements: "Overall, how satisfied are you with your life?" and the extent of agreement with the statement "All things considered, I am happy with my life"(Andersens & Withney, 1976; Campbell,
Converse & Rodgers, 1976).

The Analyses

The choice of the appropriate statistical analysis is influenced by the form of the research questions as well as by the level of measurement. As variables in Hypotheses One, Two and Three were measured at the nominal level, a nonparametric procedure is required. Contingency analysis was used to test these three hypotheses. The SPSSX contingency analysis or crosstabs procedure permits the use of control variables and statistical tests of significance (Nie, Hull, Jenkins, Steinbrenner & Bent, 1975). The nonparametric chi-square statistic was used to determine if a systematic relationship exists between variables (Huck, Cormier & Bounds, 1974; Nie et al., 1975; Norusis, 1983).

Analysis of variance (ANOVA) is the appropriate technique to use to test Hypotheses Four and Five. While some researchers argue that parametric techniques, such as ANOVA, should only be used with interval level data, other researchers contend that ANOVA is robust enough to be used with ordinal level data (Huck et al., 1974).

A number of statistical techniques are required to test Hypothesis Six. Contingency analysis should be used when career stage (as measured by the Career
Concerns Inventory and age groups, respectively) and the dependent variables (decision to retire, choice of retirement plan, type of retirement transition) are measured at the nominal level. When career stage is measured at the nominal level, with two or more factors, and the dependent variables are measured at the ordinal level, ANOVA should be used. In contrast, when age is treated as a continuous variable, discriminant function analysis should be used when the dependent variables are measured at the nominal level and regression analysis should be used when the dependent variables are measured on ordinal scales (Huck et al., 1974; Nie et al., 1975; Norusis, 1983).

In addition, to examine the relative influence of variables upon the yes/no decision to retire, discriminant analysis was used. Discriminant analysis is the appropriate technique to use when conducting a prediction study with a two level, nominal criterion variable. The Wilks' stepwise discriminant procedure was used to determine which variables contribute the most to the differentiation of the two categories. The direct discriminant procedure was used to determine the number of cases correctly classified and the relative contribution of each of the variables chosen by the Wilks' procedure (Nie et al., 1975; Norusis, 1983).
Chapter III
Results

This chapter presents the results of the data analysis based on the hypotheses outlined in Chapter I. The focus of this dissertation is the examination of the types of retirement transitions precipitated by an early retirement option. The sample is drawn from faculty members at a large midwestern university who were offered an incentive to retire in 1987 or 1988. The incentive plan provided an excellent opportunity to study retirement and career decision making, as the offer of the plan acted as a trigger event forcing people to consider career options which they may not have considered in the absence of the plan.

The frequency distribution of the number of people in each of the three career stages is presented in Table 4. An almost equal number of subjects were in the maintenance and disengagement stages. However, only eleven of the two hundred and twenty-four subjects were in the recycling stage. As the small cell size of the recycling career stage is likely to reduce the precision of the statistical tests, this group was not included
<table>
<thead>
<tr>
<th>Career Stage</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling</td>
<td>11</td>
<td>4.91</td>
</tr>
<tr>
<td>Maintenance</td>
<td>105</td>
<td>46.88</td>
</tr>
<tr>
<td>Disengagement</td>
<td>108</td>
<td>48.21</td>
</tr>
<tr>
<td>Total</td>
<td>224</td>
<td>100.00</td>
</tr>
</tbody>
</table>
in the analyses. Thus, the analyses which follow examine only the hypothesized relationships of the maintenance and disengagement stages with the dependent variables. Additionally, the number of subjects varies for each hypothesis tested due to the conditions of the hypotheses (i.e., whether all subjects are examined or if only subjects intending to retire are examined) and some subjects' failure to respond to all survey questions.

Contingency analysis is used to test Hypotheses One, Two and Three as the independent and dependent variables examined in these hypotheses are measured at the nominal level. The chi-square statistic is used to determine whether a significant difference exists between observed and expected number of responses falling into each of the two career stage categories (Norusis, 1983).

T-tests are used to examine Hypotheses Four and Five as the independent variable is dichotomous and the dependent variables are measured using an ordinal scale. Specifically, one-tailed tests are employed as both hypotheses indicate that the mean of one group is larger than the mean of the other group (Nie et al., 1975; Norusis, 1983).

Contingency analysis, t-tests, regression analysis and discriminant function analysis are used to test Hypothesis Six. Hypothesis Six examines the
effectiveness of the Career Concerns Inventory (CCI) and age (operationalized on both a nominal and interval scale) as measures of career stage. Traditionally, researchers have collected the age of subjects and then assigned subjects to the career stage with the corresponding age range. Based on Super and associates (1988), the age categories used for the Hypothesis Six analyses are 50-59 (i.e., maintenance stage) and 60 and over (i.e., disengagement). Additionally, as age is a continuous variable, Hypothesis Six will also be tested using age measured on an interval scale. To contrast the age-based measures, the CCI, which measures individuals' stage-related attitudes and behaviors, will also be examined.

Test of Hypothesis One

The first hypothesis examines the relationship between career stage and the decision to retire. Hypothesis One states: when groups are compared in terms of their decision to retire, people in the disengagement career stage are more likely to retire than are people in the maintenance career stage. Career stage and decision to retire were the two variables used to test this hypothesis.

The results of the contingency analysis for Hypothesis One are presented in Table 5. The
Table 5
Hypothesis One: Analysis of the Relationship Between Career Stage and the Decision to Retire

<table>
<thead>
<tr>
<th>Career Stage</th>
<th>Decision to Retire</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Retiring</td>
<td>Not Retiring</td>
</tr>
<tr>
<td>Maintenance</td>
<td>103</td>
<td>20</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>(33.8)</td>
<td>(33.8)</td>
<td>(69.2)</td>
</tr>
<tr>
<td>Disengagement</td>
<td>107</td>
<td>49</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>(35.2)</td>
<td>(35.2)</td>
<td>(72.1)</td>
</tr>
<tr>
<td>Total N</td>
<td>221</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ X^2 = 16.55 \quad df = 1 \quad p < .00 \]

a Numbers enclosed in parentheses are expected values.
significant chi-square(16.55) indicates that the two variables are not independent. Also, an examination of observed versus expected cell frequencies indicates, as hypothesized, that people in the disengagement stage were more likely to retire than were people in the maintenance stage. Thus, Hypothesis One was supported.

**Test of Hypothesis Two**

Hypothesis Two focuses on the relationship between career stage and choice of retirement plan (incentive or service, disability and mandatory). Hypothesis Two states: when groups are compared in terms of choosing a retirement plan, people in the disengagement stage are more likely to choose the incentive plan than are people in the maintenance stage. The two variables used to test this hypothesis are career stage and choice of retirement plan. All subjects included in this analysis were eligible for the incentive plan.

Table 6 contains the results of the contingency analysis for Hypothesis Two. A significant chi-square(20.80) was obtained. As hypothesized, people in the disengagement stage were more likely to choose the incentive plan than were people in the maintenance stage. Thus, Hypothesis Two was supported.
Table 6
Hypothesis Two: Analysis of the Relationship Between Career Stage and Choice of Retirement Plan

<table>
<thead>
<tr>
<th>Career Stage</th>
<th>N</th>
<th>Choice of Retirement Plan</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Incentive</td>
<td>Other Plans</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>85</td>
<td>31</td>
<td>54</td>
<td>(46.1)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Disengagement</td>
<td>92</td>
<td>65</td>
<td>27</td>
<td>(49.9)</td>
</tr>
<tr>
<td>Total N</td>
<td>177</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>( X^2 = 20.80 )</td>
<td>( df = 1 )</td>
<td>( p &lt; .00 )</td>
</tr>
</tbody>
</table>

<sup>a</sup> Numbers enclosed in parentheses are expected values.
Test of Hypothesis Three

Hypothesis Three examines the relationship between career stage and the type of retirement transition an individual plans to make. According to Hypothesis Three, when groups are compared in terms of the type of retirement transition chosen: (a) people in the disengagement career stage are more likely to intend to leave the workforce than are people in the maintenance stage and (b) people in the maintenance career stage are more likely to intend to do similar work to the work they are doing now than are people in the disengagement stage. The two variables used to test Hypothesis Three are career stage and type of retirement transition. All the people included in this analysis planned to retire in 1987 or 1988.

Table 7 summarizes the results of the analysis for Hypothesis Three. People in the disengagement stage tended to plan to leave the workforce, whereas people in the maintenance stage tended to plan to do similar work to what they are doing now. However, the differences between the two groups were not significant ($X^2 = .87$). Therefore, Hypothesis Three was not supported.

Test of Hypothesis Four

Hypothesis Four deals with the relationship between career stage and role transition intensity. It states:
### Table 7

**Hypothesis Three: Analysis of the Relationship Between Career Stage and Type of Retirement Transition**

<table>
<thead>
<tr>
<th>Type of Retirement Transition</th>
<th>Career Stage</th>
<th>N</th>
<th>Similar Work</th>
<th>Leave the Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maintenance</td>
<td>12</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(9.4)a</td>
<td>(2.6)</td>
</tr>
<tr>
<td></td>
<td>Disengagement</td>
<td>25</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(19.6)</td>
<td>(5.4)</td>
</tr>
<tr>
<td>Total N</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ \chi^2 = .87 \quad df = 1 \quad p < .35 \]

*a Numbers enclosed in parentheses are expected values.*
when groups are compared in terms of the intensity of their role transitions, people in the disengagement stage are more likely to have a higher level of role transition intensity than are people in the maintenance stage. Career stage and role transition intensity, as measured by choice of post-retirement work organization and type of work, were the variables used to examine Hypothesis Four. All thirty-eight people included in this analysis intend to retire in 1987 or 1988.

Results of the one-tailed t-test for Hypothesis Four are presented in Table 8. The mean intensity level(2.12) for the disengagers appears to be greater than the mean intensity level(1.33) of the maintainers, but it is not significant(t=1.51). Therefore Hypothesis Four was not supported.

Test of Hypothesis Five

Hypothesis Five focuses on the relationship between career stage and the amount of retirement preparation people have completed. Hypothesis Five states: people in the disengagement career stage are more likely to have completed a higher level of retirement preparation than have people in the maintenance career stage. Career stage and level of retirement preparation were the two variables used in this analysis.
### Table 8

**Hypothesis Four: Analysis of the Relationship Between Career Stage and Role Transition Intensity**

<table>
<thead>
<tr>
<th>Career Stage</th>
<th>N</th>
<th>$\bar{X}$</th>
<th>SD</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>12</td>
<td>1.33</td>
<td>1.30</td>
<td>1.51</td>
<td>&lt;.07</td>
</tr>
<tr>
<td>Disengagement</td>
<td>26</td>
<td>2.12</td>
<td>1.56</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results of the one-tailed t-test for Hypothesis Five are presented in Table 9. The mean of the level of preparation (5.83) for people in the disengagement stage appears to be greater than the mean level of preparation (5.31) of people in the maintenance stage, but it is not significant (t=1.34). Thus, Hypothesis Five was not supported.

The lack of support for Hypothesis Five is surprising, as Super's Theory of Career Stages contends that the major objective of the disengagement stage is to plan for retirement. In order to determine why disengagers have not completed significantly more retirement planning than maintainers, a comparison of the percentage of disengagers and maintainers engaging in specific retirement preparation activities was completed.

The results of the test for significance of difference between two proportions are presented in Table 10. Although a larger number of disengagers than maintainers had completed most of the activities, only the difference between the percentage of disengagers and percentage of maintainers who had contacted organizations about job opportunities, was significant. Reasons why Hypothesis Five was not supported are discussed in Chapter IV.
Table 9
Hypothesis Five: Analysis of the Relationship Between Career Stage and Preparation for Retirement

<table>
<thead>
<tr>
<th>Career Stage</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>98</td>
<td>5.31</td>
<td>2.81</td>
<td>1.34</td>
<td>&lt;.10</td>
</tr>
<tr>
<td>Disengagement</td>
<td>105</td>
<td>5.83</td>
<td>2.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>% of Disengagers</td>
<td>% of Maintainers</td>
<td>Z</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>Thought about R&lt;sup&gt;a&lt;/sup&gt;</td>
<td>91</td>
<td>94</td>
<td>- .80</td>
<td>.42</td>
<td></td>
</tr>
<tr>
<td>Talked With Family/Friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>About R</td>
<td>83</td>
<td>86</td>
<td>- .59</td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>Sought Information About Firm's R Benefits</td>
<td>78</td>
<td>73</td>
<td>.84</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>Talked with Boss/Co-workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>About R</td>
<td>58</td>
<td>47</td>
<td>1.59</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>Planned How Will Spend R Time</td>
<td>54</td>
<td>54</td>
<td>0</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Read About R</td>
<td>54</td>
<td>50</td>
<td>.58</td>
<td>.56</td>
<td></td>
</tr>
<tr>
<td>Made Plans To Engage In Sports/Hobbies</td>
<td>43</td>
<td>35</td>
<td>1.18</td>
<td>.23</td>
<td></td>
</tr>
<tr>
<td>Made Vacation Plans</td>
<td>34</td>
<td>28</td>
<td>.94</td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>Looked For Another Job</td>
<td>27</td>
<td>21</td>
<td>1.01</td>
<td>.31</td>
<td></td>
</tr>
<tr>
<td>Attended R Planning Workshop</td>
<td>27</td>
<td>20</td>
<td>1.18</td>
<td>.23</td>
<td></td>
</tr>
<tr>
<td>Contacted Other Firms About Job Opportunities</td>
<td>24</td>
<td>12</td>
<td>2.24</td>
<td>.03*</td>
<td></td>
</tr>
<tr>
<td>Secured Another Job</td>
<td>6</td>
<td>7</td>
<td>- .30</td>
<td>.76</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Retirement is abbreviated as 'R' within the table.
Test of Hypothesis Six

Hypothesis Six states: the Career Concerns Inventory (CCI) is a more valid measure of career stage than is age. The CCI measures career stage by examining individuals' stage-related attitudes and behavior. While the CCI has been subjected to extensive reliability and validity testing (see Super, Thompson & Lindeman, 1988 for a review), few researchers (besides Super and his associates) have used the measure. Most researchers have grouped people into career stages based upon their age. As the age-group measure of career stage is the most popular, its effectiveness, as compared to the CCI, will be examined.

Using the age ranges suggested by Super and associates (1988), people age 50-59 comprise one group (i.e., maintainers) and people age 60 and over comprise another group (i.e., disengagers). Furthermore, because age is a continuous variable, the relationship between age as a continuous independent variable and each of the five dependent variables will also be examined. To determine whether the CCI or age is a more valid measure of career stage, each of the preceding hypotheses was tested again using age as the independent variable.
Age as a Nominal Variable

Table 11 summarizes the results of the contingency analyses completed using the CCI and the nominal level age measure. As magnitude of the chi-square statistic is influenced not only by the goodness of fit of the model but also by the sample, a comparison of chi-square statistics which have different sample sizes would be meaningless. However, there are several statistics which adjust for influence of sample size upon the chi-square statistic. The eta statistic is the appropriate adjustment to use for this comparison as the independent variables are measured at the nominal level and the dependent variables are dichotomous. When eta is squared, it can be interpreted as the proportion of total variance in the dependent variable explained by the independent variable (Nie et al., 1975; Norusis, 1983).

The \( \eta^2 \) of the CCI is greater than the \( \eta^2 \) of the age group measure in all three cases examined. Therefore, for each of the three hypotheses, the CCI explains more of the variance in the dependent variable than does the age measure.

To examine the relative strength of the CCI and age group measure for Hypotheses Four and Five, the \( p \) values of t-tests were used. The t-test is the appropriate statistical technique to use as the
Table 11
Hypothesis Six: Comparison of the Career Concerns Inventory to Age Groups for Hypotheses One, Two and Three

<table>
<thead>
<tr>
<th>Measure</th>
<th>N</th>
<th>Eta²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Concerns Inventory</td>
<td>210</td>
<td>.09</td>
</tr>
<tr>
<td>Age Groups</td>
<td>197</td>
<td>.03</td>
</tr>
</tbody>
</table>

Hypothesis Two: Choice of Retirement Plan

<table>
<thead>
<tr>
<th>Measure</th>
<th>N</th>
<th>Eta²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Concerns Inventory</td>
<td>177</td>
<td>.12</td>
</tr>
<tr>
<td>Age Groups</td>
<td>166</td>
<td>.01</td>
</tr>
</tbody>
</table>

Hypothesis Three: Type of Retirement Transition

<table>
<thead>
<tr>
<th>Measure</th>
<th>N</th>
<th>Eta²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Concerns Inventory</td>
<td>37</td>
<td>.05</td>
</tr>
<tr>
<td>Age Groups</td>
<td>37</td>
<td>.03</td>
</tr>
</tbody>
</table>
dependent variables are measured on ordinal scales. Furthermore, while the magnitude of the t values cannot be used to judge the strength of the test, this information can be obtained from an examination of the p values (Huck et al., 1974).

Table 12 summarizes the results of the t-tests. While neither measure has a significant t value, the probability that the population means are equal (i.e., that there is no difference in the transition intensity and preparation level of the disengagers and maintainers) is greater for the age measure than for the CCI. Thus, the p values for the CCI are closer to the significant p value (.05) than are the p values for the age measure.

In sum, the CCI is a more valid measure of career stage than age measured on a nominal scale. For each of the five hypotheses tested, CCI was a stronger predictor of the dependent variables than was the age groups measure.

Age as a Continuous Variable

A number of different analyses were completed to determine the relative effectiveness of the CCI as compared to age, measured continuously. To determine the effectiveness of the two measures in testing the relationships described in Hypotheses One, Two and
Table 12
Hypothesis Six: Comparison of the Career Concerns Inventory to Age Groups for Hypotheses Four and Five

Hypothesis Four: Transition Intensity

<table>
<thead>
<tr>
<th>Measure</th>
<th>N</th>
<th>T-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Concerns Inventory</td>
<td>38</td>
<td>-1.51 p&lt;.07</td>
</tr>
<tr>
<td>Age Groups</td>
<td>37</td>
<td>-.89 p&lt;.19</td>
</tr>
</tbody>
</table>

Hypothesis Five: Level of Retirement Preparation

<table>
<thead>
<tr>
<th>Measure</th>
<th>N</th>
<th>T-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Concerns Inventory</td>
<td>203</td>
<td>-1.34 p&lt;.09</td>
</tr>
<tr>
<td>Age Groups</td>
<td>191</td>
<td>-.67 p&lt;.25</td>
</tr>
</tbody>
</table>
Three, discriminant analysis was used. Discriminant analysis is the appropriate technique to use when conducting a prediction study with a two-level, nominal criterion variable. By using discriminant analysis the effect of the two measures of career stage could be considered simultaneously.

Using a direct discriminant analysis, both measures were entered simultaneously. The resulting standardized canonical discriminant coefficient can be interpreted in the same way as beta weights are in a regression analysis. The greater the absolute value of the coefficient, the more important the variable is to the discriminant function (Nie et al., 1975; Norusis, 1983).

The results of the discriminant analyses for Hypotheses One, Two and Three are reported in Table 13. For the decision to retire, the two measures are approximately equal in their importance to the function. For the choice of retirement plan and type of retirement transition, the coefficients for the CCI are much larger than the coefficients for the age measure.

To determine the relative strength of the CCI and continuous age measure for Hypotheses Four and Five, regression analysis was used. Regression analysis can be used to evaluate the relative importance of independent variables in predicting values of the dependent variable (Norusis, 1983). It is assumed that
### Table 13
**Hypothesis Six: Comparison of the Career Concerns Inventory to Age as a Continuous Variable for Hypotheses One, Two and Three**

**Hypothesis One: Decision to Retire (N=197)**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Standardized Canonical Discriminant Function Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Concerns Inventory</td>
<td>-.68</td>
</tr>
<tr>
<td>Age-continuous variable</td>
<td>-.70</td>
</tr>
</tbody>
</table>

**Hypothesis Two: Choice of Retirement Plan (N=166)**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Standardized Canonical Discriminant Function Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Concerns Inventory</td>
<td>-.92</td>
</tr>
<tr>
<td>Age-continuous variable</td>
<td>-.31</td>
</tr>
</tbody>
</table>

**Hypothesis Three: Type of Retirement Transition (N=37)**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Standardized Canonical Discriminant Function Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Concerns Inventory</td>
<td>.84</td>
</tr>
<tr>
<td>Age-continuous variable</td>
<td>.47</td>
</tr>
</tbody>
</table>
the regression analysis technique is robust enough to permit its use with variables that are not measured on an interval scale (Huck et al., 1974; Nie et al., 1975).

Results of the regression analyses based on the relationships tested in Hypotheses Four and Five are presented in Table 14. The independent variable with the largest beta weight, disregarding whether the beta weight is positive or negative, is the best predictor of the dependent variable (Huck et al., 1974; Norusis, 1983).

For Hypothesis Four, the beta weight for the CCI is larger than the beta weight for the continuous age measure. For Hypothesis Five, the two measures of career stage are approximately equal in their ability to predict the level of retirement preparation.

In summary, the CCI's ability to categorize the variables was superior to the ability of the continuous age measure in three of the five comparisons. For two of the five comparisons, the two measures were almost equal in their ability to differentiate the variables. Since the CCI was a better predictor for most of the cases, regardless if age was measured nominally or as a continuous variable, Hypothesis Six was supported.
Table 14
Hypothesis Six: Comparison of the Career Concerns Inventory to Age as a Continuous Variable for Hypotheses Four and Five

Hypothesis Four: Transition Intensity (N=37)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Beta Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Concerns Inventory</td>
<td>.20</td>
</tr>
<tr>
<td>Age-continuous variable</td>
<td>.12</td>
</tr>
</tbody>
</table>

Hypothesis Five: Level of Retirement Preparation (N=191)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Beta Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Concerns Inventory</td>
<td>.09</td>
</tr>
<tr>
<td>Age-continuous variable</td>
<td>.08</td>
</tr>
</tbody>
</table>
Summary

Table 15 summarizes the hypotheses and findings. Chapter IV will discuss the findings and explore reasons why Hypotheses Three, Four and Five were not supported.

Additional Findings

As reviewed in Chapter I, past research has focused on how financial variables influence the decision to retire. While numerous studies have examined the influence of the ability to retire on the retirement decision, few studies have examined how the motivation to retire influences the decision. A discriminant analysis was completed to examine the relative effect of variables measuring the motivation to retire, as well as variables measuring the ability to retire, upon the retirement decision.

Discriminant analysis is used when conducting a prediction study with a two-level, nominal criterion variable. Linear combinations of the variables are used to distinguish between two categories or groups (Huck, et al., 1974; Norusis, 1983). For this analysis, the decision to retire is the criterion variable; either people intend to retire or they intend to remain with the organization. The Wilks' stepwise procedure was used to determine which variables contribute the most to the discrimination of the two categories. The stepwise
Table 15

Summary of the Analysis of the Hypotheses Tested

H1: Relationship between Career Stage and Decision to Retire
When groups are compared in terms of their decision to retire, people in the disengagement stage are more likely to retire than are people in the maintenance stage. SUPPORTED

H2: Relationship between Career Stage and Choice of Retirement Plan
When groups are compared in terms of choosing a retirement plan, people in the disengagement stage are more likely to choose to retire under the incentive plan than are people in the maintenance stage. SUPPORTED

H3: Relationship between Career Stage and Type of Retirement Transition
When groups are compared in terms of the type of retirement transition chosen: (a) people in the disengagement career stage are more likely to leave the workforce than are people in the maintenance career stage and (b) people in the maintenance career stage are more likely to do work similar to the work they do now than are people in the disengagement stage. NOT SUPPORTED

H4: Relationship between Career Stage and Role Transition Intensity
When groups are compared in terms of the intensity of their role transitions, people in the disengagement stage are more likely to have a higher level of role transition intensity than are people in the maintenance stage. NOT SUPPORTED

H5: Relationship between Career Stage and Retirement Preparation
People in the disengagement career stage are more likely to have completed a higher level of retirement preparation than have people in the maintenance career stage. NOT SUPPORTED

H6: Comparison of the Different Measures of Career Stage
The Career Concerns Inventory is a more valid measure of career stage than is age. SUPPORTED
procedure begins by selecting the best discriminating variable. Variables are then chosen until they no longer contribute to further discrimination: in other words, until the change in the Wilks' lambda is nonsignificant (Nie et al., 1975).

Highly correlated predictor variables (i.e., $r > .80$) can cause problems as they suggest that the contributions of individual variables may not be unique (Norusis, 1985). As the correlation between the continuous age and age group measures of career stage is .83 and thus, a discriminant analysis containing both these variables would not permit the assessment of the unique contribution of each variable, two separate stepwise analyses were completed.4

The first analysis examined career stage as operationalized by the continuous age measure, career stage as operationalized by the CCI, and the following seventeen ability and attitudinal variables: attitude toward retirement, anticipated amount of change in life due to retirement, eligibility for the incentive plan, professional commitment, life satisfaction, nonwork satisfaction, job satisfaction, satisfaction with the organization, organizational commitment, work involvement, job involvement, perceived adequacy of financial resources to retire, change in income upon retirement, marketability, health, and pressure to
retire. Twelve of these nineteen variables were selected before the change in the Wilks' lambda became nonsignificant.

The variables included in the second discriminant were career stage as operationalized by both the age group measure and the CCI, and the seventeen ability and attitudinal variables included in the first analysis. Thirteen of the nineteen variables were selected before the change in the Wilks' lambda became nonsignificant.

The variables chosen in the analyses, along with their respective standardized discriminant function coefficients, are presented in Table 16. The coefficients of variables chosen in both analyses (e.g., professional commitment, marketability, job satisfaction) are almost identical; the major difference between the two analyses is that the second analysis includes work involvement.

The standardized discriminant function coefficients can be interpreted in much the same way beta weights are interpreted in regression analysis. Each coefficient represents the relative contribution of its associated variable to the discriminant function. Therefore, the variable with the highest coefficient, regardless of its sign, is the best predictor. Additionally, by examining the groups of variables which have coefficients of different signs, it can be determined which variables
Table 16

**Best Predictors of the Decision to Retire**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Standardized Coefficient (Analysis 1)</th>
<th>Standardized Coefficient (Analysis 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Stage</td>
<td>- .59</td>
<td></td>
</tr>
<tr>
<td>Age-Continuous</td>
<td></td>
<td>- .55</td>
</tr>
<tr>
<td>Career Stage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age Groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eligibility for</td>
<td>.45</td>
<td>.45</td>
</tr>
<tr>
<td>Incentive Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Commitment</td>
<td>- .40</td>
<td>- .44</td>
</tr>
<tr>
<td>Career Stage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCI</td>
<td>- .39</td>
<td>- .42</td>
</tr>
<tr>
<td>Attitude Toward</td>
<td>- .38</td>
<td>- .37</td>
</tr>
<tr>
<td>Retirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketability</td>
<td>- .34</td>
<td>- .33</td>
</tr>
<tr>
<td>Health</td>
<td>.26</td>
<td>.24</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>.27</td>
<td>.27</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>.27</td>
<td>.24</td>
</tr>
<tr>
<td>Pressure to Retire</td>
<td>.27</td>
<td>.22</td>
</tr>
<tr>
<td>Adequacy of</td>
<td>- .18</td>
<td>- .17</td>
</tr>
<tr>
<td>Retirement Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>.16</td>
<td>.18</td>
</tr>
<tr>
<td>Work Involvement</td>
<td></td>
<td>.19</td>
</tr>
</tbody>
</table>

N=168  
N=168
are making positive or negative contributions to the function (Nie, et al., 1975; Norusis, 1985). For example, health, job satisfaction, life satisfaction, pressure to retire, work involvement and organizational commitment all make positive contributions to the function. In other words, the higher one's level of each of these variables, the more likely one is to remain with the organization and not retire. In contrast, career stage (regardless of measure), professional commitment, attitude toward retirement, marketability and adequacy of retirement income all make negative contributions to the function. The higher one's level of each of these variables (i.e., the older one is, the greater one's progression through the career stages), the more likely one is to retire and leave the organization.

Furthermore, the stepwise addition of some variables to the function can increase its explanatory power at a decreasing rate. For example, while all twelve of the variables chosen in the first analysis are able to classify 72.57% of the cases correctly, using the five best predictor variables (age, eligibility for incentive plan, professional commitment, career stage, and attitude toward retirement) results in a correct classification of 70.90%. Therefore, while a variable may be chosen for inclusion in the discriminant function
because the Wilks' lambda remains significant, this does not imply that the variable makes a large additional contribution to the function. Administrators of retirement programs attempting to influence the retirement behavior of employees need to consider both the cost of altering situational(e.g., eligibility requirements) and individual(e.g., job satisfaction) factors as well as the amount of change in behavior which will result from those alterations.

In sum, variables reflecting both the ability(i.e., eligibility for the incentive plan) and the motivation (i.e., career stage, attitude toward retirement, professional commitment) to retire contribute greatly to the decision to retire. Additionally, career stage as measured by the CCI and career stage as measured by age make unique contributions to the prediction of the retirement decision. Implications of this exploratory research will be discussed in detail in Chapter IV.
Footnotes

1 As discussed in Chapter II, analysis of variance was to be used to examine Hypotheses Four and Five because the independent variable, career stage, was a three level variable. Career stage was reduced to a two level variable due to the small number of subjects in the recycling stage. As analysis of variance and the t-test provide identical results when the means of two groups are compared, either method could be used to examine Hypotheses Four and Five (Huck et al., 1974).

2 Table 7 contains a cell with an expected frequency of 2.6. Expected cell frequencies of less than five can distort the chi-square statistic. Thus, the Yates correction for continuity was used to keep the chi-square test from being too liberal (Norusis, 1983).

3 There are no statistics available to test whether two p values, discriminant function coefficients, beta weights or nonparametric eta^2 values are significantly different.

4 Most of the correlations for other variables examined are under .20. The greatest correlation among these variables was .55 for the relationship between organizational commitment and job satisfaction. Since the correlations are not high, the contribution of these variables are probably unique.

5 A direct discriminant analysis was completed to determine the number of cases correctly classified by the discriminant functions.
CHAPTER IV
DISCUSSION, IMPLICATIONS AND FUTURE DIRECTIONS

Most of the research on the retirement process has focused on nonwork issues such as the adjustment to retirement and retirement lifestyles. Moreover, past research has consisted largely of retrospective studies which lack a theoretical foundation. In contrast, this dissertation has examined retirement using the career transitions perspective. The career transitions literature emphasizes the relationship between self-concept and work, psychological factors which influence career decision making, and individual, rather than organizational, choices and outcomes. Additionally, while past research has focused on the ability to retire (i.e., retirement income, pension plans) this dissertation examines the influence of both the ability and the motivation (i.e., attitudes) to retire upon the retirement decision.

This chapter will: (1) discuss the results presented in Chapter III, (2) detail the theoretical and practical implications of this dissertation and (3) examine future directions for research.
Discussion of Hypotheses

Hypothesis One examined the relationship between career stage and the decision to retire. As hypothesized, people in the disengagement career stage were significantly more likely to retire than were people in the maintenance career stage.

The results obtained for Hypothesis One lend support to Super's Theory of Career Stages. Super and associates (1957; 1988) contend that disengagers are either preparing for retirement or retiring. In contrast, maintainers are trying to keep the status quo; security is their objective. Thus, as disengagers are psychologically more ready for retirement than are maintainers, disengagers should be more likely than maintainers to retire.

Most of the research which has been completed on Super's Theory of Career Stages has focused on the exploration and establishment stages. Past research has supported Super's contention that people in the exploration stage search for their occupational niche and upon completion of this search, progress to the establishment stage (Gribbons & Lohnes, 1968; Super & Jordaan, 1982; Super et al., 1967; Tilden, 1978). Additionally, much research (e.g., Cashman & Brooks, 1984; Mount, 1984; Rabinowitz & Hall, 1981) has supported Super's idea that the exploration,
establishment and maintenance career stages affect people's job attitudes, values, needs and behaviors. This dissertation is the first study to test Super's assumptions about the retirement behavior of people in late career stages.

**Hypothesis Two** examined the relationship between career stage and choice of retirement plan. As hypothesized, people in the disengagement career stage were significantly more likely than people in the maintenance career stage to intend to retire under the incentive plan.

People in the disengagement stage have thought about and begun to prepare for retirement. For people in the late substages of disengagement, the incentive plan may have made their retirement more financially attractive. For people in the early substages of disengagement, the offering of the incentive plan may have caused them to move up their retirement date as the plan made retiring earlier more profitable.

**Hypotheses Three and Four** examined the relationship between career stage and type of retirement transition. While the tests of these hypotheses were nonsignificant, an examination of the observed versus expected cell frequencies shows that the findings were in the hypothesized direction. People in the disengagement stage tended to leave the workforce entirely. In
contrast, people in the maintenance stage tended to remain in the workforce, planning to do work similar to what they are doing now (Hypothesis Three). Likewise, the mean role transition intensity level was greater for the disengagers than for the maintainers (Hypothesis Four).

The lack of statistical significance for these hypotheses is probably due to the small sample sizes used to test them. Less than thirty-nine people had planned the type of transition they would engage in upon retirement from the organization. The small sample size may have reduced the power of the statistical tests (Cohen & Cohen, 1983; Hayes, 1981; Stone, 1978). For example, Hypotheses One and Two, which had sample sizes of approximately two hundred, were significantly supported.

The effect of the small sample size on statistical power is especially noteworthy when examining Hypothesis Four; the p value for the t-test of the hypothesized relationship between career stage and role transition intensity approaches significance (p < .07). A larger sample size may have resulted in a significant difference between the groups, thus lending further support to Super's contention that the major objective of maintainers is to keep the status quo, whereas the major objective of disengagers is to leave the
Hypothesis Five was not supported. While the disengagers had a slightly higher level of retirement preparation than did the maintainers, the difference between the two groups was not significant.

The nonsignificant results for Hypothesis Five may be due the poor measurement of the dependent variable. To determine level of preparation, subjects were asked whether or not they had engaged in twelve activities typically engaged in when preparing for retirement. As a scale similar to a Guttman rather than a Likert scale was used, the degree to which the subjects had completed the activities was not measured. For example, individuals who had read numerous books and articles about retirement were given the same score for that item as individuals who had read only a few articles on the topic. Thus, the variability between the responses of the disengagers and maintainers may have been reduced by the way level of preparation was measured.

Additionally, the measure of level of preparation did not account for how relevant the activity was for the individual. Although the literature on retirement preparation programs suggests that discussing retirement with one's family, seeking employment, and planning leisure activities are of equal importance, this may not be the case (Sullivan, 1986). For instance, the activity
of searching for and obtaining another job is of little importance to people retiring from the organization and leaving the workforce; in contrast, obtaining another job may be of great importance to those retiring from the organization and planning to remain in the workforce. In sum, future research examining preparation for retirement should use a scale which measures both the degree of completion of retirement activities and the importance of the activities to the individual.

The findings from Hypothesis Six indicate that the Career Concerns Inventory (CCI) is a more valid measure of career stage than are age-based measures. The age-based measures of career stage are not as good as the CCI when predicting the decision to retire, choice of retirement plan, type of retirement transition, transition intensity and level of retirement preparation. Furthermore, based on the additional findings, the age-based measures and the CCI appear to make their own substantial contribution to the examination of the retirement decision. All three measures of career stage were among the top five predictors of the decision to retire. Moreover, including one of the age-based measures in the analysis did not cause the exclusion of the attitude-based CCI; in other words, the CCI-defined career stage variable
made a contribution beyond that of the age-based measures. Therefore, a more complete understanding of career stage issues could be obtained if researchers used both the age and the CCI measures of career stage.

Implications for Theory

The results of this dissertation have three major implications for the career and retirement literatures. First, the career transitions literature is an appropriate foundation for the study of the retirement process. This literature provides a theoretical foundation for examining retirement, a basis for linking pre- and post-retirement issues, and an objective measure of the different types of retirement. Second, instruments that directly measure the attitudes and behaviors which most characterize the respective career stages should be used instead of age-based measures of the career stage concept. The test of Hypothesis Six and research by Chao (1986) suggest that psychological measures, such as the Career Concerns Inventory, are more valid than are age-based measures of career stage. Third, the motivation to retire and the ability to retire, determine the retirement decision and thus the motivation to retire is a valid area of study. Studying the decision to retire as solely a process of rational choice does not adequately explain why some
people refuse financially attractive early retirement incentive offers. By examining both the ability and motivation to retire, a better understanding of the retirement decision process could be obtained.

Theoretical Foundation for Studying Retirement

The retirement literature suffers from three major problems: (1) past research on retirement is atheoretical or is based on economic models which neglect the effect of motivation on the decision to retire, (2) past research tends to be cross-sectional, and (3) research results are difficult to compare across studies because there is no common definition of retirement. Studying retirement from the career transition perspective would solve these three major problems.

First, the career transition literature provides a theoretical foundation from which retirement could be examined. Super's Theory of Career Stages, supplemented by the works of other career transition theorists (e.g., Levinson, 1978; Schein, 1978), can be used as a meta-framework for organizing past research and for structuring future research hypotheses. For example, past research on the decision and preparation for retirement could be related to the developmental and psychological tasks of the maintenance and disengagement
stages (i.e., Hypotheses One through Five). Additionally, questions about why some people adjust easily to retirement while other people retire from an organization and then re-enter the workforce just a few years later, could be explained by matching people's career stages to the behaviors which typically characterize the stages. If one's behavior and career stage are mismatched (i.e., a person in the maintenance stage retires from the workforce), then dissatisfaction or a change in behavior to restore the match between career stage and the work situation is expected.

Second, since Super's Theory spans the career stages, it provides a basis for linking pre- and post-retirement issues. Questions such as: 'how does pre-retirement training affect adjustment to retirement?' and 'how do changes in work attitudes and situations affect the timing of the retirement decision?' require a longitudinal research approach. Super's Theory is such a longitudinal approach since it traces the development of individuals across time.

Third, the career transitions literature provides an objective measure of the different types of retirement. Traditionally, retirement has been defined from the organization's viewpoint--retirement occurs when employees accept pension benefits and leave the organization. Thus, information on whether an
individual leaves the workforce or begins a new career is disregarded. In contrast, using an individual, career transitions perspective, there are several definitions of retirement. As illustrated in Figure 1(p. 12), the different types of retirement transitions precipitated by an option to retire early can be distinguished by the number and kinds of roles shed. By defining retirement in terms of role changes, a common basis for measurement would be established so that results across studies could be more easily compared.

In sum, the career transitions literature provides a new approach to the study of the retirement process. By examining retirement within this framework, future research could be theory-based, could use a common, valid measure of career stage and could study the causes and consequences of the different types of retirement transitions.

Measurement of Career Stages

Most of the studies on career stages have used age-groups as the measure of career stages(e.g., Mount, 1984; Raelin, 1984). However, as age-based measures and the CCI do not predict with comparable strength and are not highly correlated, it is questionable that these two types of measures are examining the same thing.
To begin, the results of the test of Hypothesis Six indicate that CCI is a more valid measure of adult career stage than is age. In eight of ten comparisons between the CCI and age measures of career stage, CCI was the stronger predictor of the dependent variable. Moreover, the age measures of career stage lack convergent validity as the Career Concerns Inventory (CCI) and the age measures are not strongly correlated (Stone, 1978). The correlation between the CCI and the age group measure of career stage is .06; the correlation of the CCI and the continuous age measure is .12. The difference in the correlations is to be expected because the age group measure has more restriction in range than the continuous measure. Additionally, findings from the discriminant analysis of the retirement decision indicate that career stage, as measured by the CCI, makes its own contribution to the discriminant function, independent of the contribution made by age. These findings suggest that age and career stage are independent predictors of the retirement decision.

In sum, findings from this dissertation show that the CCI is more valid and useful than age-based measures when examining the retirement career transition. However, as age-based measures can provide the researcher with information beyond that found with the
CCI, age measures should not be discarded. It may be that the CCI measures psychological career stage whereas age measures physical maturity or another concept.

While the CCI is a more valid measure of career stage than is age and the CCI has been subjected to numerous reliability and validity tests (Super et al., 1981; 1988), no comparisons of the CCI to other psychologically-based measures of career stage have been made. An examination of the CCI and alternative measures of career stage (i.e., Rush and associates' career stage vignettes) should be completed so that the more valid measure of career stage can be determined. Once the more valid measure is determined, a standard measure of career stage can be recognized and used so that the results of future studies can be more easily compared.

Motivation to Retire

While past research has focused on financial factors (i.e., ability to retire) which contribute to the decision to retire, little research has examined the motivation to retire (For exceptions see Atchley, 1982; Barfield & Morgan, 1969; Hwalek et al., 1982). As part of this dissertation, a discriminant analysis was completed to determine the best predictors of the decision to retire. Age, eligibility for the incentive
plan, professional commitment, career stage and attitude toward retirement were the five best predictors of the decision to retire. It is interesting to note that only one of the variables, eligibility for the incentive plan, is related to the ability to retire. These results suggest that past research may have provided a lopsided view of the retirement process since the retirement decision was seen only as a rational, economic choice. Based on past research, administrators of retirement plans typically assume that changing the monetary incentive offered was the best, and perhaps only, way to influence the number of retirees accepting the incentive offer. Moreover, the actions of people who refused attractive incentive plans could not be adequately explained using rational economic models. In contrast, by examining the motivation to retire, additional insights can be gained as to why people accept or refuse retirement incentive offers.

Implications for Practice

The results of this dissertation have three major implications for practice. First, administrators of retirement incentive plans can influence the number of people accepting an incentive offer by changing the factors which influence the decision to retire. As the number of older Americans is increasing at an increasing
rate (Atchley, 1985), many companies are using early retirement incentive plans as a means of reducing their workforce. However, in about 40% of the companies using such programs, only half of those eligible for the early incentives accept the offer (Saddler, 1987). To increase the number of people accepting the incentive, program administrators can make changes in the situation so that the early retirement offer is more attractive.

For example, the number of people accepting the offer can be increased or decreased by changing the terms of the incentive plan (i.e., reduce the requirements so more people are eligible), changing employee attitudes toward retirement (i.e., dispel myths about retirement) or by changing other factors which have a strong effect on the retirement decision and which can be manipulated (e.g., marketability, job satisfaction). As listed in Table 16 (p. 91), factors which have higher coefficients should have more influence on the retirement decision; thus changes in these factors should have a greater impact than would changes in factors with lower coefficients. Factors such as anticipated amount of change due to retirement, nonwork satisfaction, satisfaction with the organization, job involvement and change in income upon retirement appear to have little effect upon the retirement decision as these variables were not selected.
by the Wilks' stepwise discriminant analysis procedure. Therefore, program administrators should concentrate on changing factors which will have the greatest impact on the retirement decision and which can be easily manipulated.

Second, if an organization decides to offer an early retirement incentive plan, care should be taken in presenting the offer to employees. During the course of the data collection phase of this dissertation, a number of subjects contacted me with questions about the research and opinions about the university's incentive plan. Some subjects saw the incentive plan not as an opportunity to make a career change, but as a threat to their work position. One professor remarked "If they think I'm ready for retirement, they're wrong. I'm too young to retire. If they think they can get rid of me, they're mistaken. This (incentive plan) is just a scheme to push us out before our time." Another professor called to ask "Did my chairman call you and tell you to send me this survey? Does he think I'm planning on retiring?" Clearly, some people see the incentive plan as a threat to their work life and their esteem as a worker. Likewise, some people view retirement as a fate worst than death; one professor said "I'd rather be dead than retired." Thus, the presentation of the incentive plan is important.
Administrators should emphasize the voluntary nature of the plan. Additionally, the reasons for offering the plan, details about what pre-retirement counseling and programs the company offers and where to call for more information should be clearly detailed in information provided to the employees. Putting pressure on people to retire can backfire. Results of the discriminant analysis indicate that people who felt pressured to retire were likely not to retire.

Third, the analysis of Hypothesis Five suggests that, in general, people do little planning for retirement. Although the measure of level of preparation used in this dissertation is questionable, the results presented in Table 10 (p. 77) indicate that approximately 50% of the disengagers surveyed have not read about retirement, attended a retirement planning workshop, made plans to engage leisure activities or searched for another job position. Since preparing for and having a positive attitude toward retirement increases one’s adjustment to retirement (Atchley, 1985; Howard et al., 1982), socially responsible organizations should offer preretirement planning and counseling. Retirement planning programs should provide a realistic preview of what retirement life is like (Sullivan, 1986; Wanous, 1980) and should dispel myths about retirement.
Moreover, retirement counseling should be done as part of a larger career development program. Approximately 36% of the subjects who were retiring had no plans as to what they intended to do once they retired. Career counseling would help employees to consider different retirement options and to determine whether they were really ready for retirement.

The Career Concerns Inventory can be used to help employees examine their readiness for retirement (Super et al., 1988). For example, if people in the maintenance stage were offered an incentive plan to retire early, it may not be in their best interests to do so. People in the maintenance stage need to maintain their position with the organization and to keep up-to-date with changes in their field. Retiring and leaving the workforce would probably result in dissatisfaction and poor adjustment to retirement. If the financial offer was so attractive that maintainers decided to retire from the organization, they should be counseled to seek similar employment with another organization.

In sum, the results of this research indicate that the administrators of retirement incentive plans can influence the number of people accepting the offer by modifying the factors which influence the decision to retire. Also, the presentation of the incentive offer can influence whether eligible employees view the offer
as a career opportunity or as a threat to their work position. Furthermore, retirement programs may be more effective when coupled with career counseling and preretirement training.

Directions for Future Research

One of the goals of this dissertation has been to introduce the career transitions literature as an appropriate foundation for the study of the retirement process. While every effort has been made to make this research internally and externally valid, it is not without its limitations. The limitations of this dissertation suggest directions for future research.

One of the major limitations of this dissertation has been its inability to study the recycling career stage. As only eleven of the two hundred and twenty-four subjects responding to the survey were classified as recyclers, this career stage was dropped from the analysis.

Super and associates(1981; 1988) describe the recyclers as people who have faced failure and have returned to the concerns of the earlier career stages of exploration and establishment. Recyclers are motivated by the need to change their occupation or work environment.
Little research has been completed on the recycling career stage. Only two studies (Morrison, 1974 & 1975 as reported in Super et al., 1981) have examined the behavior of recyclers. Morrison (1977) concluded that recyclers were less career-adaptive than other people. The value-laden terms of adaptive versus nonadaptive may have caused the recycling process to be seen as a negative event rather than as a process of renewal or career change. Because recycling has been viewed as a negative event, few researchers may have been interested in studying it. Additionally, based on this dissertation's sample, it may be difficult to locate people in the recycling career stage so that they can be studied. Therefore, in order to study the recycling process, it is recommended that researchers target groups which they believe are likely to contain a large number of recyclers. For instance, women who are re-entering the workforce after taking time off from their careers to rear children may be in the recycling career stage. Furthermore, practitioners who leave industry for academic careers may also be recyclers.

Another limitation of this dissertation is that the sample was composed solely of white-collar professionals. Studies of career stages have tended to focus on white-collar workers (Mount, 1984). While Super and associates have attempted to make the Theory of
Career Stages and Career Concerns Inventory applicable to both blue- and white-collar workers, no empirically-based conclusions on the universality of the theory and measure can be made (Super, et al., 1988). Also, the relative influence of financial and motivational factors upon people's retirement decisions may be affected by their occupations. For instance, since the work of blue-collar workers is usually more physically demanding than that of white-collar workers, the effect of health upon the retirement decision may be stronger for the blue than for the white-collar workers. Additional research needs to be done to see if the results of the hypotheses can be replicated across professions and with blue-collar workers.

Moreover, the majority of the sample used in this dissertation was men. While research indicates that women's career stages may be very similar to the career stages of men (Roberts & Newton, 1987), little research has focused specifically on the career stages of women. For example, like men, women develop dreams early in their lives. However, the dreams of women are unlike those of men. While men's dreams focus on their careers, women typically have split dreams—dreams that focus on both career and family. At about age thirty, women reappraise their lives in terms of which half of the split dream they emphasized. Women who chose to
emphasize marriage and motherhood shifted to more individual goals and psychologically separated from their husbands. Women who chose to emphasize their careers, searched for marriage and tried to establish a family or a community of friends (Roberts & Newton, 1987).

The study of women and how the split dreams influences their careers is an area for future research. A theory of career stages that takes into account the women's split dream and their separation and re-entry into the workforce after periods of child rearing, needs to be developed.

Another direction for future research is the in-depth study of the late career stages. Hall (1986) notes that one of the major deficiencies of the career transitions literature is the lack of research on the late career stages (For exceptions, see Latack & Dozier, 1984; Slocum et al., 1985). While a number of theorists (e.g., Levinson, Super) have hypothesized about attitudes and behaviors of people in the late career stages, little research has tested these hypotheses. Moreover, how attitudes and behaviors vary across the substages of the maintenance and disengagement career stages has not been examined.

Additionally, little research has focused on the use and effectiveness of early retirement incentive
plans. Only one study to date has examined the effectiveness of early retirement incentive programs. Howard (1988) examined whether companies lose their best or worst workers when retirement incentive plans are offered. She found no difference between the performance of those accepting the offer and those deciding to stay with the firm. Furthermore, retirees had less motivation and poorer attitudes toward their company and work than did people choosing not to retire. Additional research should be done to verify the results of Howard's study and to examine other attitudinal variables, including work involvement, professional commitment, organizational commitment, job satisfaction and satisfaction with the organization.
Appendix A

Survey of Career and Retirement Plans
Survey of Retirement and Career Plans

There are several sections of this survey, all dealing with various aspects of your retirement plans and work situation. Please answer each question with your honest opinion. All responses are strictly confidential. For purposes of statistical analyses, it is important you answer every question.

Please use the enclosed answer sheet to indicate your responses. Fill in your name in the space provided on the answer sheet. (Do not provide any information on your sex, birth date or identification number.) For each question, completely fill in the appropriate circle using a #2 pencil. So that the computer reads your responses correctly, it is very important that you erase cleanly any answer which you wish to change. When you are done, please return the answer sheet in the enclosed envelope.

Thank you for your cooperation.

This section of the survey asks you to provide information about your retirement eligibility and plans. Please fill in the circle of the appropriate response on your answer sheet.

1. I am: a. eligible to retire  b. not eligible to retire  If you answered 'a' please continue on with question #2.

If you answered 'b' and thus are not eligible to retire under the Retirement Incentive Plan, Service Retirement, Disability Retirement, or Mandatory Retirement, do not complete the rest of this survey. Instead return the answer sheet, in the enclosed envelope, with only your name and your answer to question #1 recorded, or call me at 392-0585, to let me know. Thank you for your assistance.

2. I plan to:
   a. retire under the Retirement Incentive Plan
   b. retire under the Service Retirement Plan
   c. retire under Disability Retirement
   d. retire due to the Mandatory Retirement Policy

3. I am:
   a. eligible for the Retirement Incentive Plan
   b. not eligible for the Retirement Incentive Plan

4. Have you notified the personnel office of your intention to retire within the next two years?
   a. Yes  b. No

5. I plan to retire in:
   a. 1987 or 1988
   b. 1989
   c. the next 4-7 years
   d. the next 8-14 years
   e. 15 or more years

6. When I retire from my present position at OSU, I plan to:
   a. continue working at OSU
   b. go to work for another organization
   c. leave the workforce
   d. I haven't made any plans yet

7. When I retire from my present position at OSU, I plan to:
   a. work doing about the same things that I do now
   b. work doing something very different from what I do now
   c. leave the workforce
   d. I haven't made any plans yet

8. When you retire, do you plan to work: (If you don't plan to work when you retire, please do not fill in any circle on your answer sheet for this item.)
   a. 1-10 hours/week
   b. 11-20 hours/week
   c. 21-30 hours/week
   d. 31-40 hours/week
   e. more than 40 hours/week

9. My health is:
   a. poor  b. fair  c. average  d. good  e. excellent

10. To what extent do you think retirement will cause changes in your life?
    a. not at all  b. very little  c. some  d. a lot  e. very much

11. Do you think the changes that will occur in your life when you retire will be:
12. To what extent do you feel pressure from others (e.g., family, friends) to retire soon?
   a. not at all  d. a lot
   b. very little  e. very much
   c. some

13. Which person or group is exerting the most pressure on you to retire? (Please leave this item blank if no one is exerting any pressure on you to retire.)
   a. Coworkers  d. Friends
   b. Superiors  e. Physician
   c. Family

14. To what extent do you feel you have adequate financial resources to retire within the next two years?
   a. not at all  d. a lot
   b. very little  e. very much
   c. some

15. In the next two years, do you think that the time and energy you devote to work will:
   a. increase  b. decrease  c. stay the same

16. In the next two years, by what percentage will the time and energy you devote to work change? (If there will be no change in the amount of time and energy devoted to work, please leave the answer to this item blank.)
   a. 1 - 20%  d. 61 - 80%
   b. 21 - 40%  e. 81 - 100%
   c. 41 - 60%

17. When you retire, your total yearly income, (include spouse's income as well as any income from investments), will:
   a. increase  b. decrease  c. stay the same

18. When you retire, by what percentage will your total yearly income, (include spouse's income as well as any income from investments), change? (If there will be no change in your income, please leave the answer to this item blank.)
   a. 1 - 20%  d. 61 - 80%
   b. 21 - 40%  e. 81 - 100%
   c. 41 - 60%

19. If you decided to leave your position within the next two years, how do you rate your chance of finding a position as good as the one you have now?
   a. Poor  d. Good
   b. Fair  e. Excellent
   c. Average

20. How often in the past year have you been forced to change plans/miss work because of health problems?
   a. Almost never  d. Quite often
   b. Not very often  e. Nearly all the time
   c. Sometimes

21. After you have retired, to what extent do you think your life will be the same as it is now?
   a. not at all  d. a lot
   b. very little  e. very much
   c. some

This section of the survey asks you about your attitude toward work and non-work aspects of your life. Please fill in the circle which reflects your opinion on each question according to the following scale:

strongly disagree  disagree  undecided  agree  strongly agree
   a  b  c  d  e

22. I am happy working for OSU.

23. I am happy with my job.

24. I am happy with the 'off the job' aspects of my life (e.g. friendships, hobbies, relationship with family).

25. All things considered, I am happy with my life.

This section of the survey asks you to focus on your feelings about the particular job you do. Using the same scale as above, indicate your opinion on each item by filling in the appropriate circle on your answer sheet.

26. The most important things that happen to me involve my present job.

27. To me, my job is only a small part of who I am.

28. I am very much involved personally in my job.

29. I love, eat, and breathe my job.

30. Most of my interests are centered around my job.

31. I have very strong ties with my present job which would be very difficult to break.

32. Usually I feel detached from my job.

33. Most of my personal life goals are job-oriented.

34. I consider my job to be very central to my existence.

35. I like to be absorbed in my job most of the time.
36. Clarifying my ideas about the type of work I would really enjoy.

37. Finding the line of work I am best suited for.

38. Choosing the most challenging among those occupations that interest me.


40. Getting started in my chosen occupational field.

41. Meeting people who can help me get started in my chosen field.

42. Finding opportunities to do work that I really like.

43. Settling down in a job I can stay with.

44. Doing things to help me stay in the field in which I have started.

45. Getting established in my work.

46. Developing a reputation in my line of work.

47. Becoming especially knowledgeable or skillful in my work.

48. Planning how to get ahead in my established field of work.

49. Doing the things that make people want me in my work.

50. Advancing to a more responsible position.

51. Improving my teaching effectiveness.

52. Improving my research effectiveness.

53. Maintaining the occupational position I have achieved.

54. Holding my own against the competition of new people entering the field.

55. Adapting to changes introduced since I got established in my occupation.

56. Keeping in tune with the people I work with.

57. Keeping the respect of people in my field.

58. Keeping up with the knowledge, equipment and methods in my field.

59. Attending meetings and seminars on new methods.

60. Visiting places where I can see new developments.

61. Getting to know important people in my field.

62. Getting refresher training to keep up.

63. Identifying new problems to work on.

64. Finding out about new opportunities as my field changes.

65. Deciding what new fields to open up or develop.

66. Developing new skills to cope with changes in my field.

67. Developing new knowledge or skills to help me improve my work.

68. Developing easier ways to do my work.

69. Concentrating on things I can do as I get older.

70. Cutting down on my working hours.

71. Avoiding occupational pressures I formerly handled easily.

72. Developing more hobbies to supplement work interests.

73. Finding activities I like in retirement.

74. Planning well for retirement.

75. Making sure I can have a good life when I retire.

76. Talking to retired friends about retirements and adjustments.

77. Setting aside enough assets for retirement.

78. Having a good place to live in retirement.

79. Having a good life in retirement.

80. Having friends I can enjoy in retirement.
91. Making good use of free time that comes with retirement.
92. Doing things I have always wanted to do but never had time for.

The following questions focus on your feelings about the organization in which you work. Please fill in the circle of the letter that reflects your opinion on each question, according to the scale below.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>undecided</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
</tr>
</tbody>
</table>

93. I am willing to put in a great deal of effort, beyond that normally expected, in order to help this organization be successful.
94. I talk up this organization to others as a great organization to work for.
95. I would accept almost any type of job assignment in order to keep working for this organization.
96. I find that my values and the organization's values are very similar.
97. I am proud to tell others that I am part of this organization.

98. This organization inspires the best in me in terms of job performance.
99. I am extremely glad that I chose this organization to work for over others I was considering at the time.
100. I really care about the fate of this organization.
101. For me, this is the best of all possible organizations for which to work.

This part of the survey asks you to indicate how satisfied you are with several aspects of your life. Please fill in the circle of the letter that best represents your level of satisfaction, according to the following scale:

<table>
<thead>
<tr>
<th>extremely dissatisfied</th>
<th>dissatisfied</th>
<th>undecided</th>
<th>satisfied</th>
<th>extremely satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
</tr>
</tbody>
</table>

102. Overall, how satisfied are you with your life?
103. How satisfied are you working for OSU?
104. How satisfied are you with your job?

95. How satisfied are you with the non-work (e.g. relationships with family, way you spend your free time) aspects of your life?

This section of the survey asks you to focus on your feelings about work in general. Using the scale below, indicate your opinion on each item by filling in the appropriate circle on your answer sheet.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>undecided</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
</tr>
</tbody>
</table>

106. The most important things that happen in life involve work.
107. Work is something people should get involved in most of the time.
108. Work should be only a small part of one's life.
109. Work should be considered central to life.
110. In my view, an individual's personal life goals should be work-oriented.
111. Life is worth living only when people get absorbed in work.

The following questions focus on your feelings about the profession in which you work. Please fill in the circle of the letter that reflects your opinion on each question, according to the scale below.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>undecided</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
</tr>
</tbody>
</table>

112. I am willing to put in a great deal of effort, beyond that normally expected, in order to help my profession to be successful.
113. I talk up my profession to others as a great field to work in.
114. I would accept almost any type of job assignment in order to keep working in my profession.
115. I find that my values and the values of those in my profession are very similar.
116. I am proud to tell others that I am part of my profession.
117. My profession inspires the best in me in terms of job performance.
108. I am extremely glad that I chose to go into my profession over the other profession(s) I was considering at the time.

109. I really care about the fate of my profession.

110. For me, this is the best of all possible professions for which to work.

This section contains questions about what actions you have taken in preparation for your retirement. Please mark the appropriate letter on your answer sheet.

111. I have:  
   a. thought about my retirement.  
   b. planned how to spend time once I retire.  
   c. both a and b above  
   d. none of the above

112. I have:  
   a. discussed my retirement with my family and/or friends.  
   b. discussed my retirement with my co-workers and/or superior.  
   c. both a and b above  
   d. none of the above

113. I have:  
   a. read books/articles on how to prepare for retirement.  
   b. sought information on OSU’s retirement plans and benefits.  
   c. both a and b above  
   d. none of the above

114. I have:  
   a. attended a retirement planning workshop.  
   b. looked for jobs that I can do once I retire.  
   c. both a and b above  
   d. none of the above

115. I have:  
   a. contacted organizations about job opportunities.  
   b. secured another job.  
   c. both a and b above  
   d. none of the above

116. I have:  
   a. made plans to visit friends/relatives and/or take a vacation upon retirement.  
   b. made plans to engage in sports and/or hobbies upon retirement.  
   c. both a and b above  
   d. none of the above

This section asks you to think about what factors influenced your decision to retire or remain with OSU over the next two years. Using the scale below, rate the extent to which each of the following factors influenced your decision to retire or to remain with OSU.

not very very at all little some a lot much

   a b c d e

117. Retirement Incentive Plan

118. Current Health

119. Financial Situation

120. Wishes of Others

121. Desire to Engage in Leisure Activities

122. Relationship with Coworker(s)

123. Relationship with Superior(s)

124. Work Load

125. Work Stress

126. Job Challenge

127. Anticipated Decline in Health

128. Family Situation

129. Alternative Work Opportunities

130. Organizational Change

Please be sure that you have written your name on the answer sheet. Then, place the completed answer sheet in the enclosed envelope.

THANK YOU AGAIN FOR YOUR TIME AND COOPERATION!

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LIST OF REFERENCES


