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Date August 1990

RETIREMENT: CHANGES IN INDIVIDUAL DIFFERENCE VARIABLES

A Thesis

Presented for the

Master of Science Degree

The University of Tennessee, Knoxville

Julie A. Davis

August 1990

DEDICATION

This thesis is dedicated to my mother, Paula Jean Davis, without whose love and support this degree would not have been possible.

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ABSTRACT

The purpose of this study was to examine the possible relationships between individual difference variables and retirement satisfaction. Sixty-six retirees participated in this present field study. These participants were asked to complete a questionnaire which measured work involvement, Type A behavior, locus of control, and retirement satisfaction. Pre- and postretirement measures were assessed using a "Then/Now" method in order to examine any within-person change.

As hypothesized, the results of this study found there to be a strong positive relationship between locus of control (both the "Then" and the "Now" measures) and retirement satisfaction. Also concurring with the hypotheses proposed in this study was the finding of negative, although not significant, relationships between the "Now" measure of work involvement and retirement satisfaction, and the "Now" measure of Type A behavior and retirement satisfaction. However, no evidence was found for inverse relationships between the "Then" measures of work involvement and Type A behavior and retirement satisfaction.

Finally, retirement satisfaction was found to be predictable by using work involvement, Type A behavior, and locus of control "Now" scores with the "Then" scores partialled out. The amount of time spent in leisure activities was

discovered to be a moderator variable. The practical and theoretical implications of these results are discussed, as well as the limitations of the study. Recommendations for future research follow.

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CHAPTER I

INTRODUCTION

Today, retirement is widespread in the U.S. In the last half of this century, retirement has evolved from the right of a priveleged few to an institution for the majority of the U.S. workers. In fact, in 1988 alone, 1,410,000 people started receiving Social Security benefits (Marilyn Ayers, personal communication, April 24, 1989). Because retirement can conceivably last one quarter of a person's life, its influence on the individual and society is pervasive. Therefore, this major event in our life cycle is not only important to study, but necessary as well.

Retirement has been studied from many different perspectives. Some of the most common areas examined are: the relationship between attitude to work and attitude to retirement (Abel & Hayslip, 1987a; Fillenbaum, 1971; Glamser, 1976; Goudy, Powers, & Keith, 1975a; Goudy, Powers, & Keith, 1975b; Hooker & Ventis, 1984; McGee, Hall, & Lutes-Dunckley, 1979), sex differences between men and women in later life (Atchley, 1976; George, Fillenbaum, & Palmore, 1984; Keith, 1985), the relationship between life satisfaction and retirement (Baur & Okun, 1983; Bell, 1978-79; Schmitt, White, Coyle, & Rauschenberger, 1979; Wexley, McLaughlin, & Sterns, 1975), and adaptation/adjustment to retirement (Beck, 1982;

Cherry, Zarit, & Krauss, 1984; Eisdorfer, 1972; Maddox, 1970; Shanas, 1972). Other, less frequently studied areas include: the consequences of retirement (Palmore, Fillenbaum, & George, 1984), the relationship between job attitudes and the decision to retire (Schmitt & McCune, 1981), predictors of retirement (Palmore, George, & Fillenbaum, 1987), phases of retirement (Ekerdt, Bosse, & Levkoff, 1985), the relationship between retirement timing and retirement satisfaction (Price, Walker, & Kimmel, 1979), the relationship between retirement choice and retirement satisfaction (Kimmel, Price, & Walker, 1978), and the relationship between adjustment to and satisfaction with retirement (Beck, 1982).

The area of retirement satisfaction is of particular interest because assessment of it and its correlates may lead to identifying those subgroups more likely to be negatively affected by retirement. Yet, retirement satisfaction has not been examined from the perspective of changes in the constructs: job involvement; Type A behavior; and locus of control, as measured before and after retirement.

However, Hooker and Ventis (1984) investigated the relationship between work values using the Protestant Ethic scale (PE) and retirement satisfaction using the Retirement Description Index (RDI). They found that PE was negatively correlated with RDI indicating that a strong work ethic is inversely related to satisfaction in retirement ($\underline{r}$ = -.28,

$p < .01$). Because this study measured PE scores only once, it is not possible to know whether the subjects' work values changed after retirement or remained stable. It is also important to note that although belief in the centrality of work may result from Protestant-Ethic-type socialization, job involvement and the Protestant Ethic are not the same construct.

Only one study (Keith, 1985) has even measured attitudes toward work and retirement pre- and postretirement. Nevertheless, Keith did not examine the relationship between these two measures. As a result, no insight into the job involvement and retirement satisfaction relationship was provided.

Ten years ago, Bell (1978-79) expressed the need for more investigation of the role of individual difference variables in the retirement process. Apparently, the retirement literature has continued to neglect to investigate possible changes in constructs when measured before and after retirement. For example, individuals who score high on a job involvement scale before and/or after retirement may find it more difficult to adjust to retirement than those who score low on the same scale. As a result, these high scoring job-involved persons may be less satisfied with their retirement than their low scoring counterparts.

Two additional individual difference variables, locus of control and Type A behavior, have also been ignored in the retirement literature. Information is especially lacking regarding possible shifts in Type A behavior (e.g., from Type A to Type B) and locus of control (e.g., from internal to external) after retirement. What happens, for example, to individuals with Type A personalities and/or an internal locus of control after they retire? While both locus of control and Type A behavior are considered to be a stable personality variables (Runyon, 1973, cited in Rabinowitz & Hall, 1977; Boyd & Begley, 1987, respectively), two studies have found Type A behavior and locus of control to change with age (Howard, Rechnitzer, Cunningham, & Donner, 1986; Knoop, 1989, respectively).

Besides the dearth of information regarding the effects of retirement on individual difference variables, two recurrent problems underlie much of retirement research. These problems are (a) the use of nonretirees as subjects, and (b) the lack of appropriate research designs and methods. Unfortunately, much of the research on retirement does not use retirees as participants as one would expect. Alternatively, researchers often use preretirees as subjects. Thus, it is necessary to make an inferential leap from the findings using preretirees and their attitudes toward retirement (an event the respondents

have not yet experienced) to retirees and their actual satisfaction with retirement.

Additionally, few longitudinal studies exist in the literature which examine the retirement process from beginning to end (Beck, 1982; Bell, 1978-79; Bosse & Ekerdt, 1981; George et al., 1984; Goudy et al., 1975b; Keith, 1985; Keith, Goudy, & Powers, 1984; Palmore et al., 1984; Wexley et al., 1975). While this list may appear extensive at first glance, many of these studies used the same longitudinal database from which to conduct their research and write their articles (e.g., The Duke Second Longitudinal Study, The Retirement History Study). Surprisingly, even fewer cross-sectional studies have been conducted (Bosse & Ekerdt, 1981; Ekerdt et al., 1985; Price et al., 1979; Shanas, 1972; Simpson, Back, & McKinney, 1966). Instead, most of the research on the consequences of retirement has been limited to data collection on one group of people at one point in time (i.e., one group post-test only design). Since retirement is a process that occurs over time, it is therefore impossible to test such transitions with the available data. More longitudinal studies could help the field advance significantly.

Rationale for Present Study

Methodological improvements over previous studies are greatly needed. Goudy et al. (1975a) suggest that longitudinal research is necessary so that work and retirement satisfaction can be related and the differences between work satisfaction-retirement attitude and work attitude-retirement satisfaction findings can be observed. While a longitudinal study would be ideal, it is not feasible for this research. Instead, the use of a "Then/Now" measure was employed.

"Then" are retrospective ratings taken at the same time as "Now" ratings. This requires subjects to respond twice to each item on the survey. Usually "Then" ratings immediately follow the response of each "Now" rating. Subjects therefore need to shift their frame of reference from the present to a designated previous point in time and back again. The "Then/Now" design has been found to be robust with regard to problems of saliency, priming, and order effects (Terborg & Davis, 1982). Howard and Dailey (1979) and Howard, Ralph, Gulanick, Maxwell, Nance, and Gerber (1979) also found that the use of retrospective "Then" ratings were not biased by memory distortion or social desirability.

The purpose of this study was to explore the relationships between: job involvement; Type A behavior; locus of control and retirement satisfaction. This task was

accomplished by using retirees as subjects and employing a "Then/Now" method of design.

CHAPTER II

LITERATURE REVIEW

While few available studies have specifically measured changes in job involvement, Type A behavior (e.g., Howard et al., 1986), or locus of control (e.g., Knoop, 1989) before and after retirement, many studies have investigated different aspects of these three individual difference variables. Some of these studies are discussed below. However, due to the research methods employed, the conclusions can be considered very tentative.

Although some studies on retirement conclude that withdrawal from the labor force has little impact upon retirees (Palmore et al., 1984), other studies strongly disagree (Goudy et al., 1975b). There is clearly a lack of fit between theoretical expectations and research findings about the impact of retirement. It is, therefore, imperative for retirement research to identify the subgroups for whom the retirement transition is particularly difficult. Preretirement programs aimed at alleviating the stress of retirement could then focus selectively on the minority that need it. This idea of identifying subgroups is elaborated upon in this chapter along with a discussion of the present study.

Job Involvement

Definition of Job Involvement

Due to the lack of a standard definition for job involvement, Rabinowitz and Hall (1977) discuss what they believe to be the two main, yet separate, concepts used to describe it. The first concept, the performance-self-esteem contingency, describes the job-involved person as one who feels that work is an important part, if not the most important part, of life (i.e., "a central life interest," Dubin, 1956). As a result, the job-involved person does the majority of his living on the job. Work, however, does not play as important a part in the life of the non-job-involved person. His/her interests lie in some other area such as family, recreation, or church. There does exist a third type of person who does not express a preference for acting out certain behaviors in one environment (e.g., work) over another (e.g., community). These individuals, considered by Dubin and Champoux (1977) to have a flexible focus central life interest, are not committed to any one locale. The component of self-image is the second concept used to describe job involvement. Lodahl and Kejner (p. 24, 1965) define job involvement as "the degree to which a person is identified psychologically with his work, or the importance of work in his total self-image."

Another definition of job involvement has been offered by Kanungo (1982a). He discusses what he calls the "extra meanings" of job involvement and distinguishes between the terms "job involvement" and "work involvement." While the former refers to a descriptive belief that is contemporary in nature (i.e., a specific job), the latter refers to a normative belief that is historical in nature (i.e., work in general). Due to the multiple interpretations of job involvement, this study focused on Rabinowitz and Hall's performance-self-esteem contingency concept and Kanungo's definition of work involvement. These definitions of job involvement are applicable when examining the retirement process and the other definitions are not.

Previous Research on Job Involvement and Retirement

Many different aspects of retirement and central life interests have been studied over the years. In the past, theoretical treatments of retirement have assumed that attitudes toward retirement were a function of the worker's commitment to work. This assumption that positive attitudes toward work would be reflected in negative perceptions of retirement has received only partial support in the literature (Fillenbaum, 1971; Goudy et al., 1975a; Saleh & Otis, 1963; Simpson et al., 1966).

For example, in 1963, Saleh and Otis's study of the attitudes toward mandatory retirement of preretirees found that employees who reported high job satisfaction were negative toward retirement and that employees who reported low job satisfaction were positive toward retirement. On the other hand, Simpson et al., (1966) discovered inconsistencies between retirement and work attitudes when occupational level was controlled. A relationship was found to exist between attitude toward retirement and work commitment only among upper occupational status respondents. In other words, the more positive their commitment to the job, the less likely they were looking forward to retirement. While for middle and lower occupational level respondents, no relationship was found between job involvement and pre-retirement attitude.

In 1971, Fillenbaum also examined the hypothesis of an inverse relationship between work satisfaction and retirement attitude. Although the subjects differed in their age, sex, race, and occupational status, they did not differ in their attitude to retirement (81 percent were positive) and exhibited few differences in their job attitude. Therefore, the hypothesis was not supported since subjects having either a positive or negative view of retirement expressed the same job attitude. Fillenbaum concluded that only when the job was a central organizing factor in a person's life would it affect his/her retirement attitude and that such a level of importance

would be reached for only a few people. However, her data did not permit a test of this conclusion.

Another example of a study investigating this inverse relationship hypothesis can be found in Goudy et al. (1975a). These researchers examined retirement attitudes for consistency by obtaining several different measures of work satisfaction and employment saliency, in addition to retirement attitudes. They found that only suggested retirement age consistently related to work satisfaction in the predicted inverse direction. That is, the greater the work satisfaction, then the older the suggested age for retirement. Because the results of one measure of employment saliency (forced ranking of work with alternative values), offered no support for the inverse relationship hypothesis, the relationship between job and retirement attitudes was not found to be consistent in this study. Nevertheless, in those cases where the inverse relationship was upheld, statistically significant correlation coefficients ranged from $\underline{r}$ = .05 to .18.

More recent research indicates that the inverse relationship between commitment to work and attitude towards retirement has been exaggerated (Glamser, 1976). In an attempt to explain the disparity between recent research and the earlier theoretical formulations, Glamser suggested that attitudes toward work and retirement have been changing in American society because "the importance of work as a primary

source of meaning and satisfaction in life has probably declined" (p. 104). Glamser hypothesized that one's realistic appraisal of the type of retirement experience s/he expected would be more predictive of attitude toward retirement than one's commitment to work. That is, those who could realistically expect a positive retirement experience would be more likely to have a positive attitude toward retirement than those expecting a negative retirement experience. Since Glamser found no statistically significant relationship between attitude toward retirement and commitment to work (r = .01), the relationship between attitude toward retirement and the worker's realistic appraisal of the type of retirement experience which s/he expected proved to be more important. This does not, however, answer the question of how retirement affects commitment to work.

The question of whether or not work commitment changes in persons nearing retirement was addressed by Hanlon, in 1983, (cited in Ekerdt, 1986). He found no decline in work commitment among persons approaching retirement. Therefore, it seems that a positive value orientation toward work remains stable up to the time of retirement. Yet, Hanlon did not address the issue of what may happen to these persons' work commitment when they no longer work. In sum, job involvement has proved to be quite stable when studied over time (Lodahl & Kejner, 1965; Rabinowitz & Hall, 1977). However, to date, no

one has studied the retirement process in conjunction with the stability of job involvement.

Type A Behavior

Although it is not clear just how Type A behavior plays a part in the retirement process, Beehr (1986) proposed that a Type A person is less likely to look forward to retirement than others, because the Type A is more likely to miss the pressures, deadlines, and competition opportunities of his/her daily work life.

Definition of Type A/Type B Personality

The Type A individual is characterized by "excessive drive, aggressiveness, ambition, involvement in competitive activities, frequent vocational deadlines, pressure for vocational productivity, and an enhanced sense of time urgency" (Jenkins, Rosenman, & Friedman, 1967, cited in Sales, 1969). In fact, Type A individuals have been found to work an average of six hours more per week than Type B individuals (Friedman & Rosenman, 1959, cited in Sales, 1969). Additional attributes of Type A behavior include vigorous verbal and psychomotor mannerisms, easily aroused anger and hostility, impatience, restlessness, alertness, and striving for achievement (Howard et al., 1986; Jenkins Zyzanski, & Rosenman, 1971).

The opposite person, the Type B subject,

> is more relaxed and more easy going, seldom becomes impatient and takes more time to enjoy avocational pursuits. He is not easily irritated and works steadily, but without a feeling of being driven by a lack of time. He is not preoccupied with social achievement, and is less competitive in his occupational and avocational pursuits. (Jenkins et al., 1967, cited in Sales, 1969).

Previous Research on Type A Behavior and Retirement

Only one study has examined the relationship between Type A behavior and retirement (Howard et al., 1986). These researchers assessed Type A behavior via interviews conducted within three months prior to retirement and at 12 months after retirement. Their results indicated that the magnitude of Type A behavior did change in the Type B direction after one year of normal retirement. Howard et al. recommended that collecting this same measure five years after retirement would add to our knowledge of how retirement affects Type A behavior.

Previous Research on Type A Behavior and Job Involvement

The Jenkins Activity Survey (JAS) was designed to measure Type A behavior. Two of the JAS's four major components are the Type A scale and the J factor (job involvement). Jenkins et al. (1971) found a correlation between these two scales of $r = .34$. Therefore, a highly job-involved person is more than likely to have Type A behavior. If one assumes that a job-

involved person will experience difficulty with retirement, then a Type A person will also.

Locus of Control

Definition of Locus of Control

When an individual's action is followed by a reinforcement, the individual can interpret the event as either being the result of luck or chance or as being the result of a skill or a behavior. If the person perceives the former situation, then they are considered externally controlled. On the other hand, an internally controlled person perceives the latter situation. That is, the person interprets the event as being determined by his/her own behavior or skill rather than by fate.

Rotter (1966) defined locus of control as being a "generalized attitude, belief or expectancy regarding the nature of the causal relationship between one's own behavior and its consequences" (p.2). Locus of control is considered by Runyon (1973, cited in Rabinowitz & Hall, 1977) to be a "relatively stable personality characteristic." However, he did not examine the retirement process in conjunction with the stability of this personality variable. On the other hand, Knoop (1989) found internality to decline in retirement and explained this decrease in control

> When reinforcement sequences that arise from work are removed at retirement and not replaced by another set of reinforcements . . . opportunities for reinforcement that strengthen expectancies are decreased. There is frequently less to control, command, or direct after retirement. . . . Thus, with fewer events contingent on one's own behavior, belief in internal control is less firm (p. 102).

Previous Research on Locus of Control and Job Involvement

The relationship between locus of control and job involvement, and locus of control and retirement satisfaction has been previously studied, although not extensively. For example, Rabinowitz and Hall (1977) offered an updated profile of Lodahl and Kejner's (1965) job-involved person. An internal locus of control was presented among this list of job-involved characteristics.

In addition, Runyon (1973, cited in Rabinowitz & Hall, 1977) found job involvement, when measured by Lodahl and Kejner's job involvement scale, to be a function of the Internal-External dimension of personality, when locus of control was measured by Rotter's (1966) scale. More specifically, high job involvement scores were associated with the internal end of the scale. Evans' investigation (cited in Rabinowitz & Hall, 1977) supported Runyon's findings. Evans found job involvement to be significantly related to internal control on Rotter's Internal-External (I-E) Scale.

Further evidence of this internal locus of control and high job involvement relationship can be found when using a measure other than Rotter's scale to assess locus of control. For instance, the Desired Control Measure (DCM) is specifically designed to measure locus of control in older persons (Reid & Ziegler, 1980). This scale measures both the desirability and expectancy of controlling various daily life events confronting older persons.

When using the DCM, Abel and Hayslip (1987a) found both perceived control and expectancy of control correlated ($p < .05$) with work commitment. That is, those persons with an internal locus of control were also highly committed to work. On the other hand, Reddy and Rahman (1984) did not find job involvement to be dependent on locus of control. That is, internals were not more job involved than externals.

Previous Research on Locus of Control and Retirement

The relationship of Rotter's (1966) I-E Locus of Control Scale to retirement satisfaction was investigated by Schmitt et al. in 1979. Using the Retirement Description Questionnaire to assess retirement satisfaction, Schmitt et al. found locus of control to be significantly correlated with retirement satisfaction. In other words, internals, who believe that they have control over the events that affect them, are more satisfied with their retirement than externals. Additionally,

it has been shown that older persons who exhibit an internal locus of control demonstrate higher levels of adjustment to retirement (Mancini, 1981; Reid, Haas, & Hawkins, 1977; Rodin & Langer, 1977; all cited in Abel & Hayslip, 1987a). Therefore, it appears that internals are more satisfied with their retirement experience.

Previous Research on Locus of Control and Type A Behavior

Locus of control has also been linked to the need for achievement. For example, the work of McClelland, Atkinson, Clark, and Lowell (1953) and of Atkinson (1958) (both cited in Rotter, 1966) implies that high need for achievement people are internally controlled. Since Type A people have been characterized as achievement striving (Dembroski, MacDougall, & Musante, 1984; Howard et al., 1986; Jenkins et al., 1971), one could hypothesize that locus of control and Type A behavior are somehow related. Specifically, internals and Type As would be positively correlated. Along these lines it has been hypothesized that external persons are generally passive (Rotter, 1966). If this is true, one could surmise that internal persons are generally aggressive which is another personality trait usually associated with Type As. Evidence of this internal locus of control and Type A relationship was found by Dembroski et al. (1984). These researchers found that I-E scores correlated with the JAS Type A scale ($p < .01$).

Thus, an internal locus of control was characteristic of JAS-defined Type A. However, studies by Frost and Wilson (1983) and Heilbrun (1989) found no relationship between Type A behavior and locus of control. Frost and Wilson used the Behavior Activity Profile A-B Personality scale and Rotter's I-E scale, while Heilbrun used the JAS and the adult Nowicki-Strickland I-E Locus of Control scale.

Research Problem

One major conclusion that can be reached from the previous research reviewed above is that loss of the work role does not necessarily result in personal crisis for all retirees. The question of whether the relinquishment the work roles does result in some decrease in retirement satisfaction for a significant number of retirees is still unknown.

In a study reported over 30 years ago, Dubin (1956) found that for one out of every four industrial workers studied (N = 491), work was a central life interest. Likewise, approximately 25 percent of the retired men Keith et al. (1984) studied (N = 1332) found a greater sense of accomplishment in work than in family. This suggests that a minority of men found it difficult to replace work values with those of family or leisure. If this holds true today, 25 percent of existing retirees represents a substantial number.

In 1985, there were 25.8 million people 65 years and older (Gibbs, 1988). For 6.45 million of these retirees (assuming everyone 65 years and older is retired), adjustment to retirement may be especially troublesome. Practitioners need to be made aware of this select group so that they will help these persons find opportunities from which a sense of accomplishment can be derived. The sooner this effort of replacing rewards formerly obtained from work is undertaken (e.g., before retirement) the better. In fact, Ekerdt (1986) recommends that workers in their 50's should be "educated for leisure" in preparation for retirement. Unfortunately, even this age may be too late.

In 1970, Maddox stated that

> if we wait until a person is in retirement to inquire about how that experience can be made a satisfactory one, we have probably waited too long. We will be fighting the wrong battle at the wrong time in most cases. More and more we are realizing that if the battle for adequate adaptation in retirement is to be fought successfully, it must be fought in the younger years (p. 18).

In an attempt to classify future retirees into groups so that appropriate retirement plans can be made, most retirement studies focus on today's worker who is tomorrow's retiree. An additional problem is that a lot of research on the consequences of retirement has been limited to data gathering at a single point in time as opposed to longitudinal data gathering. As a result, findings have been mixed. Obviously,

methodological improvements over previous studies are called for.

The Present Study

The present study examined the relationships between work involvement, Type A behavior, locus of control and retirement satisfaction. Next, the predictability of retirement satisfaction using the three independent variables was examined. In addition, the presence of potential moderator variables was investigated.

Hypotheses

Hypothesis 1. Both work involvement and Type A behavior "Then" scores will be negatively related to retirement satisfaction "Now" scores; and locus of control "Then" scores will be positively related to retirement satisfaction "Now" scores.

Hypothesis 2. Both work involvement and Type A behavior "Now" scores will be negatively related to retirement satisfaction "Now" scores; and locus of control "Now" scores will be positively related to retirement satisfaction "Now" scores.

Hypthesis 3. The difference between both job involvement and Type A behavior "Now" and "Then" scores will be negatively related to retirement satisfaction "Now" scores; and the difference between locus of control "Now" and "Then" scores

will be positively related to retirement satisfaction "Now" scores.

Hypothesis 4. Retirement satisfaction will be predictable by using work involvement, Type A behavior, and locus of control "Now" scores with the "Then" scores partialled out.

Hypothesis 5. Length of time retired, amount of time spent in leisure activities, and number of paid hours per week presently worked will be examined as possible moderator variables.

CHAPTER III

METHOD

Research Design

The present investigation represented a field study of retirees. Participants were asked to complete a questionnaire. Major variables measured were demographics, work involvement, Type A behavior, locus of control, and retirement satisfaction. The three independent variables, work involvement, Type A behavior, and locus of control were measured twice, "Then" and "Now." This retrospective approach was used as a way to tap any within-subject changes in these variables that occurred over time (i.e., after retirement).

Participants were asked to answer each item on the questionnaire twice. First, they were asked to respond to each question as how they currently feel ("Now" ratings). After responding to each item in this manner, participants were asked to answer the same item again, but as how they now feel they would have answered it prior to retirement ("Then" ratings). In this study, "Then" was operationalized as the participants' previous feelings regarding work involvement, Type A behavior, and locus of control prior to their retirement and "Now" was operationalized as the participants' present feelings.

Participants

Participants for this study were all members of the First Baptist Church Senior Adults (FBCSA) of Wilson, North Carolina. Retirement may be defined either objectively or subjectively and measured in many different ways (e.g., age or receiving a pension). In this study, retirement was operationalized by the participants defining themselves as retired.

Because retirement satisfaction has been found to be a more salient aspect of the recent retiree's adaptation than longer-term retirees (Cherry et al., 1984), this study included both short- and long-term retirees to determine if length of time retired was a moderator variable. Two additional variables examined were number of paid hours per week presently worked and number of hours per week spent in recreational activities. Retirement has been found to have a stronger impact upon time spent in hobbies for women than for men (George et al., 1984).

The demographic characteristics of the sample were as follows: 1) 56% of the respondents were female, 2) the average age was 73 years old, 3) 5% had never married, 56% were married, 5% were divorced, 35% were widowed, 4) 27% had graduated from high school, 29% had some college education, 11% had a college degree, 17% had some graduate study, 16% had graduate degrees, 5) 97% had held a white collar job before

retiring (e.g., the most common jobs reported were bookkeeper/secretary (7), nurse (6), teacher (6), manager (6), social worker (3), and doctor (3); the only blue collar job reported was that of a carpenter), 6) 3% had poor health, 21% had fair health, 57% had good health, 19% had great health, 7) 15% had an annual retirement income between $5,000 and $14,999, 37% between $15,000 and $24,999, 16% between $25,000 and $34,999, 32% over $35,000, 8) 10% were forced to retire, 44% retired voluntarily, 46% reached retirement age, 9) the average number of years retired was 10, 10) 80% presently worked 0 paid hours per week, 8% worked less than 10 hours, 6% worked between 10 and 19 hours, 6% worked 20 or more hours, 11) 22% worked less than 40 hours per week before retirement, 64% worked between 40 and 49 hours, 14% worked over 50 hours, 12) 76% received a pension, 13) the average number of hours spent in recreational activities per week was 14, 14) 40% currently held leadership roles. The demographic characteristics of the participants in the study are reported in Figure 1.

Procedure

Prior to distributing the questionnaire, a pilot study was conducted on twelve retirees in order to check: 1) the

SEX:	Male = 44% Female = 56%
AGE:	Mean = 73 years, sd = 7.80
MARITAL STATUS:	Never Married = 5% Married = 56% Divorced = 5% Separated = 0% Widowed = 35%
EDUCATION:	Some High School = 0% High School Graduate = 27% Some College = 29% Two Year College Degree = 3% Four Year College Degree = 8% Some Graduate Study = 17% Advanced Degree = 16%
OCCUPATION:	White Collar = 97% Blue Collar = 3%
HEALTH:	Poor = 3% Fair = 21% Good = 57% Great = 19%
RETIREMENT INCOME:	Less Than $5,000 = 0% $5,000 to $9,999 = 6% $10,000 to $14,999 = 9% $15,000 to $19,999 = 16% $20,000 to $24,999 = 21% $25,000 to $29,999 = 8% $30,000 to $34,999 = 8% Over $35,000 = 32%
REASON FOR RETIREMENT:	Forced = 10% Voluntary = 44% Reached Retirement Age = 46%
NUMBER OF YEARS RETIRED:	Mean = 10 Years, sd = 6.71

Figure 1. Demographic Characteristics of the Sample

NUMBER OF PAID HOURS PER WEEK PRESENTLY WORKED:	0 Hours = 80% Less Than 5 Hours = 5% 5 to 9 Hours = 3% 10 to 14 Hours = 3% 15 to 19 Hours = 3% 20 or More Hours = 6%
NUMBER OF PAID HOURS PER WEEK WORKED BEFORE RETIREMENT:	Less Than 20 Hours = 3% 20 to 29 Hours = 3% 30 to 39 Hours = 16% 40 to 49 Hours = 64% Over 50 Hours = 14%
NUMBER RECEIVING A PENSION:	76%
NUMBER OF HOURS PER WEEK SPENT IN RECREATIONAL ACTIVITIES:	Mean = 14 Hours, sd = 13.00
NUMBER CURRENTLY HOLDING ANY LEADERSHIP ROLES:	40%

Figure 1 (Continued)

amount of time it took to complete the survey, 2) if there were any questions about the instructions or format, and 3) if there were any problems regarding the readability of the questionnaire (i.e., the size of the print). As a result of the pilot study, Rotter's Locus of Control scale was dropped from the survey, along with the five filler items on the Work Involvement Questionnaire. Additionally, the questions were reformatted in order to make it easier to understand how to respond to them.

Questionnaire packages were distributed to each of the 80 members of the FBCSA of Wilson, NC who attended the monthly luncheon on October 24, 1989. Each package contained a cover letter (Appendix A), a survey (Appendix B), and a stamped, self-addressed return envelope. The cover letter introduced the researcher and explained the general purpose of the study. Recipients were informed that participation in the study was voluntary and that all responses would be kept confidential. If they decided not to participate, recipients were requested to return the blank questionnaire immediately in the envelope provided. The importance of returning the completed survey early was stressed and a deadline date given (i.e., October 31, 1989).

Instructions in the cover letter indicated that if the recipient was interested in receiving a summary of the results, they needed to write "copy of results requested" on the back of

the return envelope and print their name and address below it. A handwritten postscript urging a response was also included (i.e., P.S. We need your help in this study. Could you please send it in promptly?) (Blumberg, Fuller, & Hare, 1974).

Due to the attendance of only four men at the luncheon, it was necessary to mail each of the 75 male members of the FBCSA a questionnaire package. These packages were identical to the ones distributed at the luncheon with the exception of a later deadline date (i.e., November 16, 1989).

Originally, 155 questionnaires were distributed. Ninety-five of these were returned, a response rate of 61%. However, only 66 of these questionnaires were used, a response rate of 43% (44% response rate from questionnaires distributed at the luncheon and 37% response rate from questionnaires distributed through the mail). The remaining 29 surveys were deleted because of missing data.

Measures

Independent Measures

Work Involvement. Many different scales have been used to measure the central life interest type of involvement (e.g., Davis, 1966, cited in Saleh & Hosek, 1976; Dubin, 1956; Kanungo, 1982a; Lodahl & Kejner, 1965; Saleh & Hosek, 1976). The measure of job involvement used in this study was Kanungo's

(1982b) Work Involvement Questionnaire (WIQ) (see Figure 2). While Lodahl and Kejner's Scale is the more traditional way to measure job involvement, Kanungo's Questionnaire perhaps more accurately taps into the global aspect of job involvement rather than the specific.

Work involvement was measured by an six-item Likert scale with five possible responses each: strongly disagree, disagree, neutral/undecided, agree, and strongly agree. A sample item was, "Life is worth living only when people get absorb in work." The range of possible scores was 6 to 30, with the higher scores indicating higher work involvement. Psychometric properties of this scale are satisfactory with internal consistency $\underline{r}$ = .75 and test-retest reliability $\underline{r}$ = .67 (Kanungo, 1982b). The coefficient alpha estimate of reliability for this scale obtained with this sample was .86 for the "Now" measure and .82 for the "Then" measure. Since these estimates of reliability are adequately high, all items were retained for analysis.

A "Then/Now" measure was taken for the WIQ scale in order to examine any changes in work involvement before and after retirement. Based on previous research, it was expected that participants with high work involvement would be less satisfied with retirement, as measured by the Retirement Descriptive Index, than participants with low work involvement.

Part 1 Work Involvement

1. The most important things that happen in life involve work.
2. Work is something people should get involved in most of the time.
3. Work should be only a small part of one's life.
4. Work should be considered central to life.
5. In my view, an individual's personal life goals should be work-oriented.
6. Life is worth living only when people get absorbed in work.

Figure 2. Work Involvement Survey Items

Type A Behavior. The Jenkins Activity Survey (JAS) is a widely used scale designed to measure Type A tendencies. Form C, the most recent version, has four major components: the Type A scale, factor S (speed and impatience), factor J (job involvement), and factor H (hard-driving and competitive). The JAS consists of 52 multiple-choice items with the Type A scale consisting of 21 items. This study used an abbreviated 16-item version (JAS items 3, 5, 6, 7, 9, 10, 11, 17, 18, 19, 21, 25, 28, 30, 32, and 40) (see Figure 3). These 16 items were judged by the present author to be the most relevant to retirees.

Respondents were asked to indicate which of the possible choices was the best answer. A sample item was, "Ordinarily, how rapidly do you eat?" Behavior type was assessed by summing the corresponding weights of the marked responses. Due to the negative weights assigned to some of the items, scores could range from -26 to 343, with higher scores representing the Type A end of the scale.

Although controversy has recently arisen over the JAS's usefulness and reliability (Boyd & Begley, 1987), reliability estimates for the Type A scale appear to be adequate. For example, estimates of item reliabilities range from $\underline{r}$ = .27 to $\underline{r}$ = .75. Additionally, the internal consistency reliability coefficient has been reported to be $\underline{r}$ = .85. Test-retest coefficients range from $\underline{r}$ = .60 to $\underline{r}$ = .70 for retest intervals of from six months to four years (Mitchell, 1985).

Part 2 Personal Style Issues

1. Is (Was) your everyday life filled mostly by
   a. problems needing solution?
   b. challenges needing to be met?
   c. a rather predictable routine of events?
   d. not enough things to keep me interested or busy?

2. When you are (were) under pressure or stress, what do (did) you usually do?
   a. Do (Did) something about it immediately
   b. Plan(ned) carefully before taking any action

3. Ordinarily, how rapidly do (did) you eat?
   a. I am (was) usually the first one finished.
   b. I eat (ate) a little faster than average.
   c. I eat (ate) at about the same speed as most people.
   d. I eat (ate) more slowly than most people.

4. Has (Had) your spouse or a friend ever told you that you eat (ate) too fast?
   a. Yes, often
   b. Yes, once or twice
   c. No, never

5. When you listen(ed) to someone talking, and this person takes (took) too long to come to the point, how often do (did) you feel like hurrying the person along?
   a. Frequently
   b. Occasionally
   c. Almost never

6. How often do (did) you actually "put words in the person's mouth" in order to speed things up?
   a. Frequently
   b. Occasionally
   c. Almost never

7. If you tell (told) your spouse or a friend that you will (would) meet somewhere at a definite time, how often do (did) you arrive late?
   a. Once in a while
   b. Rarely
   c. I am (was) never late.

Figure 3. Personal Style Survey Items

8. Do (Did) you consider yourself to be
   a. definitely hard-driving and competitive?
   b. probably hard-driving and competitive?
   c. probably more relaxed and easy going?
   d. definitely more relaxed and easy going?

9. Would your spouse or closest friend rate (have rated) you as
   a. definitely hard-driving and competitive?
   b. probably hard-driving and competitive?
   c. probably more relaxed and easy going?
   d. definitely more relaxed and easy going?

10. Would your spouse or closest friend rate (have rated) your general level of activity as
   a. too slow--should be (have been) more active?
   b. about average--busy most of the time?
   c. too active--should (have) slow(ed) down?

11. Would people who know (knew) you well agree that you have less energy than most people?
   a. Definitely yes
   b. Probably yes
   c. Probably no
   d. Definitely no

12. How is (was) your temper?
   a. Fiery and hard to control
   b. Strong, but controllable
   c. No problem
   d. I almost never get (got) angry.

13. How often are (were) there deadlines in your life?
   a. Daily or more often
   b. Weekly
   c. Monthly or less often
   d. Never

14. Do (Did) you ever set deadlines or quotas for yourself at work or at home?
   a. No
   b. Yes, but only occasionally
   c. Yes, once a week or more

Figure 3 (Continued)

15. At work or at home, do (did) you ever keep two tasks moving forward at the same time by shifting back and forth rapidly from one to the other?
    a. No, never
    b. Yes, but only in emergencies
    c. Yes, regularly

16. When you are (were) in a group, how often do (did) the other people look to you for leadership?
    a. Rarely
    b. About as often as they look(ed) to others
    c. More often than they look(ed) to others

Figure 3 (Continued)

In this study, the standardized coefficient alpha for the "Now" measure of Type A behavior was .59. However, it was necessary to drop item 10 from the "Then" measure of Type A behavior in order to increase the coefficient alpha from .43 to .50. Although these coefficient alphas are not as high as expected or desired, for the purpose of this study, their magnitudes were considered adequate.

The JAS was administered twice in order to gather data for "Then" and "Now". It was predicted that Type A participants would be less satisfied with retirement than Type B participants.

Locus of Control. The measure of locus of control used in this study was Reid and Ziegler's (1980) Desired Control Measure (DCM). The DCM consists of 70 Likert-type items, half of which measure the value an individual places on a number of reinforcements, and the other half of the items measure the degree to which the person feels each respective reinforcement can be realized or obtained. The instrument thus produces two scores, a Desire score and an Expectancy score, respectively. In addition, a total Desired Control score can be obtained by summing the cross products of the corresponding desirability and expectancy items. Alpha coefficients for the Desire and Expectancy subscales range from .82 to .90, and for the total Desired Control scale from .82 to .91 (Reid & Ziegler, 1980).

One year test-retest stability coefficients are considerably lower however (r = .54 and r = .63).

This study used the DCM-Short Form (Ziegler & Reid, 1979, cited in Abel & Hayslip, 1987b) which consists of 16 desirability items (see Figure 4) and 16 expectancy items (see Figure 5). A sample item for the desirability scale was, "How desirable to you is having your family visit you?" A sample item for the expectancy scale was, "People tend to ignore my advice and suggestions." Each participant was required to respond along a five-point Likert continuum from very undesirable to very desirable for the desirability scale and from strongly disagree to strongly agree for the expectancy scale. Possible scores ranged from 16 to 400, with higher scores reflecting more internality of control.

The estimated coefficient alphas for the DCM scale used in this study were .78 for "Now" and .84 for "Then." For the Desirability "Now" subscale item 12 was dropped in order to raise the coefficient alpha from .69 to .71. The other subscale, Expectancy, had a "Now" coefficient alpha of .65. The estimated reliabilities for the "Then" subscales of Desirability and Expectancy were .75 and .77, respectively.

Responses to the DCM were gathered twice, "Then" and "Now". It was expected that participants with an internal locus of control would be more satisfied with retirement than participants with an external locus of control.

Part 3 Life Style Issues: Desirability

1. How desirable is (was) it to you that people ask(ed) you for advice and suggestions?
2. How important is (was) it to you that you maintain(ed) your health?
3. Is (Was) being able to get along with people you meet (met) important to you?
4. Is (Was) being able to arrange for outings important to you?
5. Is (Was) being able to contact your family whenever you wish(ed) desirable to you?
6. How important is (was) being able to spend your time doing whatever you want(ed)?
7. Is (Was) being able to find privacy important to you?
8. How important is (was) it that you do (did) the chores yourself without any help?
9. Is (Was) having your friends and family visit when you invite(d) them important to you?
10. How desirable is (was) it to you that you can (could) be active whenever you wish(ed)?
11. How important is (was) it that you find (found) people who are (were) interested in hearing what you have (had) to say?
12. How desirable is (was) it to you to get away from the house?
13. How desirable to you is (was) having your family visit you?
14. How desirable is (was) it to you to be able to help others?
15. How important is (was) it to you that you can (could) have your friends over whenever you want(ed)?
16. Is (Was) keeping in contact with interesting ideas desirable to you?

Figure 4. Desirability Survey Items

Part 4 Life Style Issues: Expectancy

1. People tend(ed) to ignore my advice and suggestions.
2. Maintaining my level of health strongly depends (depended) on my own efforts.
3. It is (was) difficult for me to get to know people.
4. I can (could) usually arrange to go on outings that I am (was) interested in.
5. The situation in which I live(d) prevents (prevented) me from contacting my family as much as I wish(ed).
6. I spend (spent) my time usually doing what I want(ed) to do.
7. Although it is (was) sometimes strenuous, I try (tried) to do the chores by myself.
8. I find (found) that if I ask(ed) my family or friends to visit me, they come (came).
9. I have (had) quite a bit of influence on the degree to which I can (could) be involved in activities.
10. I can (could) rarely find people who will (would) listen closely to me.
11. My getting away from the house generally depends (depended) on someone else making the decisions.
12. Visits from my family or friends seem(ed) to be due to their own decisions and not to my influence.
13. People generally do (did) not allow me to help them.
14. I can (could) entertain friends when I want(ed).
15. Keeping in contact with interesting ideas is (was) easy for me to do.
16. I am (was) able to find privacy when I want(ed) it.

Figure 5. Expectancy Survey Items

Demographics. Demographic variables were collected in order to evaluate possible response bias and external validity (see Figure 6). The demographic variables included age, sex, marital status, education, previous occupation, health, retirement income, reason for retirement, year retired, past and present numbers of work hours per week, pension, current recreational activities, number of hours spent in these recreational activities, and current leadership roles held, if any.

Dependent Measure

Retirement Satisfaction. The Retirement Descriptive Index (RDI) by Smith, Kendall, and Hulin (1969) measures specific aspects of retirement such as satisfaction with activities, finances, people, and health (see Figure 7). Respondents were asked to indicate (Y = yes, N = no, ? = undecided) whether or not each of the 63 items described a particular aspect of their retirement situation such as boring, useless, etc. The RDI items were scored according to the following weights: yes to a positive item = 3 points; no to a negative item = 3 points; ? to any item = 1 point; yes to a negative item = 0 points; and no to a positive item = 0 points. Retirement satisfaction was assessed by summing weights. Possible scores ranged from 0 to 189, with higher scores indicating a higher satisfaction with retirement.

Part 6 Demographic Information

1. Your sex.
2. Your age.
3. Your present marital status.
4. Which is the highest level of education that you have completed?
5. What was your occupation before retirement?
6. Your current health.
7. What was your approximate net family income from all sources, before taxes in 1988?
8. Your reason for retirement.
9. What year did you retire?
10. How many paid hours per week do you presently work?
11. How many paid hours per week did you work before you officially retired?
12. Do you receive a pension?
13. What are your current leisure activities, hobbies, or pursuits (including games, voluntary organization participation, church attendance, etc.)?
14. Altogether, how many hours per week do you spend in this (these) recreational activity(ies)?
15. Are you currently holding any leadership roles in any group or organization? If so, please specify.

Figure 6. Demographic Information Survey Items

Part 5 Retirement Satisfaction

ACTIVITIES AND WORK:

Tiresome	Useless
Discouraging	Limited
Exciting	Same thing every day
Good	Creative
Fascinating	Nothing to do
Hard	Nothing to look forward to
Boring	Relaxing
Challenging	New things to do
Interesting	Gives sense of accomplishment

FINANCIAL SITUATION:

Barely live on income	Good pension plan
Insecure	Have to make do
Satisfactory	Serious financial problems
Well off	No money to meet emergencies
Steady	Income from investments
Bad	Need help from children
Need outside help	Income provides luxuries
Worry about it	Self-supporting
High income	Good life insurance plan

HEALTH:

Have a lot of minor ailments
Need little or no medical care
Feel tired all the time
Must be careful what I do
Excellent
Failing
Never felt better
Poor
Better condition than most people my age

PEOPLE YOU ASSOCIATE WITH:

Worried	Too slow
Boring	Narrow interests
Active	Intelligent
Sympathetic	Stimulating
Confident	Talk too much
Too quiet	Interesting
Complaining	Hard to meet
Stubborn	Healthy
Good	Interested in doing things

Figure 7. Retirement Satisfaction Survey Items

The internal consistency of the total RDI obtained with this sample was .92. All the subscales were found to be internally consistent with coefficient alphas exceeding .80. Therefore, all 54 items were retained for analysis.

Strategy of Analysis

Three separate Pearson correlation coefficients were calculated to determine the relationship between each of the independent variable's "Then" scores and the dependent variable's "Now" score. Another three separate correlations were calculated to determine the relationship between each of the independent variable's "Now" scores and the dependent variable's "Now" score. Three additional correlations were calculated to determine the relationship between the discrepancies in the independent variable's "Then" and "Now" scores and the dependent variable's "Now" score.

Finally, multiple linear regression analysis was used to evaluate the contribution of the "Now" independent variables, while partialling out the "Then" responses, in explaining the variance of the dependent variable. In order to determine the presence of possible moderator variables, additional hierarchial regression analyses using multiplicative terms (Cohen & Cohen, 1975) were run. All analyses were computed using SPSS PC+ (Noruisis, 1988).

CHAPTER IV

RESULTS

The purpose of this study was to examine the possible relationships between individual difference variables and retirement satisfaction. Specifically, it was proposed that persons with high work involvement, Type A behavior, and/or an external locus of control would experience less retirement satisfaction than those persons with low work involvement, Type B behavior, and/or an internal locus of control. Additionally, the predictability of retirement satisfaction and the presence of potential moderator variables were investigated.

In this chapter, the results of the study are presented in three parts. The descriptive statistics of the scales used in the survey are reported first. The second part explores the hypothesized relationships between the independent and dependent variables via correlational analyses. Finally, Part 3 reports the results of several multiple regression equations used to examine the predictability of the dependent variable and the existence of possible moderator variables.

Descriptive statistics for the "Now" and "Then" independent variables are reported in Table 1. This table includes total sample mean, standard deviation, and range for each scale and subscale used in the study.

Table 1. Descriptive Statistics of Study Variables.

Variable	M	SD	Range
INDEPENDENT (n = 66)			
THEN Measures:			
Work Involvement	20.88	4.54	10-29
Type A Behavior	153.32	52.78	49-268
Desired Control	240.61	44.46	132-371
Desirability	66.27	5.60	51-79
Expectancy	57.61	7.26	39-78
NOW Measures:			
Work Involvement	18.58	5.00	10-29
Type A Behavior	115.42	47.16	39-254
Desired Control	257.94	36.63	171-376
Desirability	63.33	4.70	52-73
Expectancy	61.18	5.56	49-79
DEPENDENT (n = 64)			
Retirement Satisfaction	145.20	26.98	81-189
Activities & Work	44.58	11.13	6-54
Finance	41.16	9.66	11-54
Health	17.36	7.27	0-27
People Assoc. With	42.11	12.29	18-54

Correlational analyses were used to test the first three hypotheses presented in Chapter 2. The results are reported in Tables 2, 3, and 4.

Hypothesis 1

The first hypothesis proposed that the relationship between "Then" work involvement and retirement satisfaction would be negative, as well as the relationship between "Then" Type A behavior and retirement satisfaction. In addition, it was expected that the relationship between "Then" locus of control and retirement satisfaction would be positive.

As indicated in Table 2, this hypothesis received only partial support. No relationship between "Then" work involvement and retirement satisfaction, and "Then" Type A behavior and retirement satisfaction was found (r = .01, n.s.; r = .05, n.s., respectively). These findings were contrary to the predictions offered in the study. As a result, high work-involved persons did not report lower retirement satisfaction than low-work involved persons, and Type A behavior persons did not report lower retirement satisfaction than Type B behavior persons. In regards to the relationship between work involvement and retirement satisfaction, similar results were reported by Glamser (1976) and McGee et al. (1979) when they examined the relationship between commitment to work and attitude toward retirement.

Table 2. Intercorrelations Among THEN Measures of Independent Variables and Dependent Variables.

Variables	1	2	3	3a	3b	4	4a	4b	4c	4d
INDEPENDENT										
THEN Measures:										
1. Work Involvement	--	20	01	04	00	01	-14	22*	06	-07
2. Type A Behavior		--	18	31**	07	05	09	11	08	-12
3. Desired Control			--	78***	93***	44***	34**	37**	12	29*
3a. Desirability				--	50***	36**	46***	17	02	22*
3b. Expectancy					--	41***	22*	43***	15	27*
DEPENDENT										
NOW Measures:										
4. Retire. Satis.						--	65***	59***	64***	77***
4a. Activs. & Work							--	06	26*	32**
4b. Finance								--	34**	25*
4c. Health									--	32**
4d. People Assoc. With										--

Note: Decimals have been omitted. n = 64.
*p < .05. **p < .01. ***p < .001.

Table 3. Intercorrelations Among NOW Measures of Independent Variables and Dependent Variables.

Variables	1	2	3	3a	3b	4	4a	4b	4c	4d
INDEPENDENT										
NOW Measures:										
1. Work Involvement	--	-07	-06	12	-22*	-06	-17	08	-08	01
2. Type A Behavior		--	-03	-04	-03	-12	-04	-19	06	-12
3. Desired Control			--	80**	89***	53***	57***	13	32**	36**
3a. Desirability				--	46***	33**	49***	-06	10	26*
3b. Expectancy					--	55***	49***	23*	39**	35**
DEPENDENT										
NOW Measures:										
4. Retire. Satis.						--	65***	59***	64***	77***
4a. Activs. & Work							--	06	26*	32**
4b. Finance								--	34**	25*
4c. Health									--	32**
4d. People Assoc. With										--

Note: Decimals have been omitted. $n = 64$.
*$p < .05$. **$p < .01$. ***$p < .001$.

Table 4. Intercorrelations Among Difference Scores of Independent Variables and Dependent Variables.

Variables	1	2	3	3a	3b	4	4a	4b	4c	4d
INDEPENDENT										
1. Work Involvement	--	09	-04	-02	-11	-08	-05	-14	-17	08
2. Type A Behavior		--	04	22	-04	-15	-12	-27*	-02	00
3. Desired Control			--	67***	93***	00	18	-38***	21	01
3a. Desirability				--	40***	-12	-08	-34**	11	00
3b. Expectancy					--	02	20	-33**	19	00
DEPENDENT										
4. Retire. Satis.						--	65***	59***	64***	77***
4a. Activs. & Work							--	06	26*	32**
4b. Finance								--	34**	25*
4c. Health									--	32**
4d. People Assoc. With										--

Note: Decimals have been omitted. n = 64.
*p < .05. **p < .01. ***p < .001.

However, the analyses did reveal a positive and significant relationship between locus of control and retirement satisfaction (r = .44, $p < .001$). This finding concurs with the premise of this study that people with an external locus of control may experience lower amounts of retirement satisfaction than people with an internal locus of control. Even the subscales, Desirability and Expectancy, were positively correlated with the RDI (r = .36, $p < .001$, r = .41, $p < .001$, respectively).

Hypothesis 2

The second hypothesis proposed that the relationship between "Now" work involvement and retirement satisfaction would be negative, as well as the relationship between "Now" Type A behavior and retirement satisfaction. In addition, it was expected that the relationship between "Now" locus of control and retirement satisfaction would be positive.

In Table 3, the relationships between "Now" work involvement and retirement satisfaction, and "Now" Type A behavior and retirement satisfaction, while in the predicted direction, failed to reach significance (r = -.06, n.s., r = -.12, n.s., respectively). Owing to the weakness of these reported relationships, the premise that retirees with either high work involvement or Type A behavior would report significantly less retirement satisfaction than retirees with

either low work involvement or Type B behavior did not receive support.

The analyses also revealed a positive and significant relationship between locus of control and retirement satisfaction ($\underline{r}$ = .53, $p < .001$). Both subscales, Desirability and Expectancy, were also positively correlated with the RDI ($\underline{r}$ = .33, $p < .01$, $\underline{r}$ = .55, $p < .001$, respectively). Additionally, three of the four RDI subscales (i.e., Activities and Work, Finance, People You Associate With) were significantly related to the DCM.

As expected, these results indicated that retirees with an internal locus of control experienced more retirement satisfaction than retirees with an external locus of control. This finding coincides with the findings of previous research (Schmitt et al., 1979).

Hypothesis 3

Because data on the independent variables investigated in this study were gathered twice ("Then" and "Now"), it was possible to evaluate within-person change with respect to the two time periods. However, it should be noted that problems of interpreting gain scores exist. To quote Cronbach and Furby (1970), "raw gain scores formed by subtracting pretest scores from posttest scores lead to fallacious conclusions, primarily because such scores are systematically related to any random

error of measurement" (p. 68). Therefore, these raw differences were computed simply to examine whether changes in the independent variables from "Then" to "Now" were positive or negative and in any way related to retirement satisfaction.

The third hypothesis proposed that the relationship between the difference score of work involvement "Now" and "Then" and retirement satisfaction would be negative, as well as the relationship between the difference score of Type A behavior "Now" and "Then" and retirement satisfaction. In addition, it was expected that the relationship between the difference score of locus of control "Now" and "Then" and retirement satisfaction would be positive.

As predicted, the correlations between the difference in the "Now" and "Then" measure of work involvement and retirement satisfaction, and the difference in the "Now" and "Then" measure of Type A behavior and retirement satisfaction were negative, although nonsignificant (r = -.08, n.s.; r = -.15, n.s., respectively) (see Table 4). Three of the four subscales of the RDI (i.e., Activities and Work, Finance, Health) were also negative, but nonsignificant, in regards to the relationship between work involvement and retirement satisfaction, and Type A behavior and retirement satisfaction.

Although the subjects in this study experienced lower work involvement after retirement ("Now" measure) than before retirement ("Then" measure), this fact apparently had no

significant effect on their retirement satisfaction. Also, the finding that subjects moved in a Type B direction after retirement, which is consistent with previous research findings (Howard et al., 1986), had no significant effect on their retirement satisfaction.

Contrary to the hypothesized positive relationship between the difference in the "Now" and "Then" measure of locus of control and retirement satisfaction, no relationship was found ($\underline{r}$ = .00, n.s.). As for the Desirability and Expectancy subscales, a negative but nonsignificant relationship was found between Desirability and RDI ($\underline{r}$ = -.12, n.s.) and no relationship was found between Expectancy and RDI ($\underline{r}$ = .02, n.s.). While both "Then" and "Now" locus of control were positively related to retirement satisfaction, the change in locus of control over time had no effect on retirement satisfaction.

In summary, the results of the correlational analyses revealed only some of the expected relationships. For example, internal locus of control retirees reported higher levels of retirement satisfaction than external locus of control retirees. The analyses did not, however, reveal the anticipated relationships between work involvement and retirement satisfaction, and Type A behavior and retirement satisfaction. These results suggested that retirement satisfaction was relatively unrelated to the degree to which

the person was work involved or exhibited Type A behavior. Thus, retirees with high work involvement did not experience significantly less retirement satisfaction than those with low work involvement. Likewise, there was no evidence that either Type A or Type B retirees differed significantly on the amount of retirement satisfaction they experienced.

Hypothesis 4

The fourth hypothesis proposed that retirement satisfaction would be predictable by using "Now" measures of work involvement, Type A behavior, and locus of control while holding the "Then" responses constant. Before a regression analysis was run to test this hypothesis, the intercorrelations among the independent variables were calculated (see Table 5). Owing to the lack of high intercorrelations among the independent variables, no multicollinearity appeared to exist. The only exception was the weak, but significant, relationship between the "Then" measures of work involvement and Type A behavior (r = .20, p < .05). This relationship is similar to that found by Jenkins et al. (1971). However, two other observations regarding the intercorrelations require comment. First, the relationships between both the "Then" and "Now" measures of work involvement and locus of control (r = .01, n.s., r = -.06, n.s., respectively) were contrary to those found by Abel and Hayslip (1987a) and Runyon (1973, cited in

Table 5. Intercorrelations Among THEN and NOW Independent Variables.

Variables	1	2	3	3a	3b	4	5	6	6a	6b
THEN Measures:										
1. Work Involvement	--	20*	01	04	00	60***	-03	-12	-02	-18
2. Type A Behavior		--	18	31**	07	07	39***	25*	26*	20
3. Desired Control			--	78***	93***	08	-09	73***	55***	67***
3a. Desirability				--	50***	17	-09	69***	76***	45***
3b. Expectancy					--	03	-08	58***	30*	65***
NOW Measures:										
4. Work Involvement						--	-07	-06	12	-22*
5. Type A Behavior							--	-03	-04	-03
6. Desired Control								--	80**	89***
6a. Desirability									--	46***
6b. Expectancy										--

Note: Decimals have been omitted. n = 66.
*p < .05. **p < .01. ***p < .001.

Rabinowitz & Hall, 1977). The difference between the findings reached in this study (i.e., no relationship) and previous research (i.e., positive relationship) may be due to the use of different measuring devices. Although Abel and Hayslip used the same scale to measure locus of control as the one used in this study (i.e., DCM short form), they used Thompson's Commitment to Work scale instead of Kanungo's Work Involvement Questionnaire. Additionally, their subjects were older workers, while this study used only retirees as subjects. Runyon also used different scales to measure locus of control and work involvement. However, Reddy and Rahman (1984) found work involvement to be independent of locus of control which concurs with this study's finding. Second, the relationship between the "Then" measure of Type A behavior and locus of control was $\underline{r}$ = .18, n.s. and for the "Now" measure $\underline{r}$ = -.03, n.s. While Dembroski et al. (1984) found evidence of an internal locus of control and Type A relationship (i.e., positive), Frost and Wilson (1983) and Heilbrun (1989) found no such evidence.

In order to test the hypothesis of retirement satisfaction predictability, a regression analysis was performed by simultaneously entering the three "Then" independent variables first into the equation, followed by the three "Now" independent variables. The result of the

regression equation is reported in Table 6. The analysis indicated that the change in R-squared from .193 in the first set to .320 in the second set was equivalent to .127 ($p < .05$). In other words, about 19 percent of the variance in retirement satisfaction was accounted for by the "Then" variables alone. However, when the "Now" variables were entered into the model and the "Then" responses held constant, the variance accounted for increased by almost 13 percent to reach a total of 32 percent. This finding was consistent with the expectation for this study. Thus, retirement satisfaction can be successfully predicted.

Hypothesis 5

The final hypothesis concerned the existence of moderators among the demographic variables. Specifically, length of time retired, amount of time spent in leisure activities, and number of paid hours per week presently worked, were examined for their potential role as moderator variables.

In order to test for the potential moderator variables, hierarchial regression analyses were performed by entering the predictor variable (e.g., work involvement) first. Next, the moderator variable (e.g., length of time retired) was entered into the equation, followed by the predictor variable by a moderator variable interaction term (the product of the

Table 6. Multiple Regression Prediction Equation for Retirement Satisfaction

Variable	r	B	Beta[a]	R[b]	R^2
THEN Measures:					
Desired Control	.44	.06	.09		
Work Involement	.01	.96	.16		
Type A Behavior	.05	-.04	-.09		
				.440	.193
NOW Measures:					
Type A Behavior	-.12	-.04	-.07		
Work Involvement	-.06	-.77	-.14		
Desired Control	.53	.36	.50		
Total				.566	.320
Increase				.356	.127*

[a]Beta refers to the standardized regression coefficients.
[b]R refers to the Multiple R.
*$p < .05$.

predictor variable and the moderator variable, (Cohen & Cohen, 1975)) with retirement satisfaction as the dependent variable.

Equations 1 through 6, in Table 7, tested for the length of time retired as a possible moderator, while equations 7 through 12 tested for the number of paid hours per week presently worked as a possible moderator. Finally, equations 13 through 18 tested for the amount of time spent in leisure activities. The results of the analyses, reported in Table 7, revealed the amount of time spent is leisure activities to be a moderator variable only between the relationships of "Then" work involvement and retirement satisfaction and "Now" locus of control and retirement satisfaction.

Table 7. Regression Analyses of Moderator Variables.

Equation	Variable	R	R^2	R^2 Change
1	NOW Work Invol (WI)	.0650	.0042	
	Year Retired (YR)	.1465	.0215	
	WI X YR	.1469	.0216	.0001
2	THEN Work Invol (WI)	.0162	.0003	
	Year Retired (YR)	.1311	.0172	
	WI x YR	.1514	.0229	.0057
3	NOW Desir Cont (DC)	.5332	.2843	
	Year Retired (YR)	.5350	.2862	
	DC X YR	.5415	.2933	.0071
4	THEN Desir Cont (DC)	.4877	.2378	
	Year Retired (YR)	.4885	.2386	
	DC X YR	.4976	.2476	.0090
5	NOW Type A Beh (TA)	.1347	.0181	
	Year Retired (YR)	.1743	.0304	
	TA X YR	.1838	.0338	.0034
6	THEN Type A Beh (TA)	.0791	.0063	
	Year Retired (YR)	.1336	.0178	
	TA X YR	.1355	.0184	.0006
7	NOW Work Invol (WI)	.0650	.0042	
	Hours Worked (HW)	.1875	.0351	
	WI X HW	.1886	.0356	.0005
8	THEN Work Invol (WI)	.0162	.0003	
	Hours Worked (HW)	.1663	.0276	
	WI X HW	.1771	.0314	.0038
9	NOW Desir Cont (DC)	.5332	.2843	
	Hours Worked (HW)	.5679	.3225	
	DC X HW	.5680	.3226	.0001

Table 7 (Continued)

Equation	Variable	R	R^2	R^2 Change
10	THEN Desir Cont (DC)	.4877	.2378	
	Hours Worked (HW)	.5185	.2688	
	DC X HW	.5188	.2692	.0004
11	NOW Type A Beh (TA)	.1347	.0181	
	Hours Worked (HW)	.2085	.0435	
	TA X HW	.2197	.0483	.0048
12	THEN Type A Beh (TA)	.0791	.0063	
	Hours Worked (HW)	.1814	.0329	
	TA X HW	.2361	.0557	.0228
13	NOW Work Invol (WI)	.0650	.0042	
	Leisure Hours (LH)	.1991	.0396	
	WI X LH	.2337	.0546	.0150
14	THEN Work Invol (WI)	.0162	.0003	
	Leisure Hours (LH)	.1962	.0385	
	WI X LH	.3486	.1215	.0830*
15	NOW Desir Cont (DC)	.5332	.2843	
	Leisure Hours (LH)	.5417	.2934	
	DC X LH	.6055	.3667	.0733*
16	THEN Desir Cont (DC)	.4877	.2378	
	Leisure Hours (LH)	.5210	.2714	
	DC X LH	.5366	.2879	.0165
17	NOW Type A Beh (TA)	.1347	.0181	
	Leisure Hours (LH)	.2645	.0699	
	TA X LH	.2707	.0733	.0034
18	THEN Type A Beh (TA)	.0791	.0063	
	Leisure Hours (LH)	.1986	.0394	
	TA X LH	.2362	.0558	.0164

*R^2 increment statistically significant ($p < .05$).

CHAPTER V

DISCUSSION

The purpose of this study was to investigate relationships among work involvement, Type A behavior, locus of control, and retirement satisfaction. In this chapter, the major findings of the study are reviewed. Next, the implications of these findings for theory and practice are discussed. Finally, the limitations of this study are addressed, followed by recommendations for future research.

Major Findings

Contrary to expectation, no significant relationship was found to exist between work involvement and retirement satisfaction. Instead of high work-involved persons reporting significantly less retirement satisfaction than low work-involved persons, no distinction between high and low work-involved people, either before or after retirement, could be made. It was also hypothesized that Type A behavior persons before and after retirement would report less retirement satisfaction than Type B persons. However, lower retirement satisfaction did not occur for the Type A persons participating in this study. Therefore, according to the results of the correlational analysis, work involvement and Type A behavior

were not significantly inversely related to retirement satisfaction. The present findings are contrary to the results of Simpson et al. (1966) and Hooker and Ventis (1984).

Several possible explanations for the nonsignificant results exhibited in this study are available. First, several studies have linked hostility, a major part of Type A behavior, to high blood pressure which over time leads to damaged arteries and heart attack (Ubell, 1990). Therefore, those persons with Type A behavior, which is positively related to work involvement, may already be deceased, thereby making it impossible to establish a relationship between Type A behavior and retirement satisfaction. A second and related explanation could be due to the restriction of range in the present sample. For example, for the "Now" measure, there may have been an insufficient number of Type As, and for the "Then" measure, there may have been an insufficient number of Type Bs for a relationship between behavior pattern and retirement satisfaction to be established. Yet another explanation for the difference between the conclusions reached in this study and previous research may stem from differences in the way in which work involvement and retirement were operationalized. Of course, a final explanation for the lack of statistical evidence could be that the hypothesized relationships simply do not exist.

As found in previous literature (Schmitt et al., 1979), persons with an internal locus of control in the current study reported significantly more retirement satisfaction than those persons with an external locus of control. Obviously, those subjects who believe they have internal control, that is, the perception of a connection between one's action and its consequences, are more satisfied with their retirement than those subjects who feel that they have little or no control over the events in their life.

As reported in Chapter 4, the "Now" independent variables added significantly to the "Then" independent variables as predictors of retirement satisfaction. This finding confirms the hypothesis. Collectively, work involvement, Type A behavior, and locus of control accounted for 32 percent of the variance in retirement satisfaction.

Regarding the moderator variable, the amount of time spent in leisure activities, correlational analysis showed that while "Now" locus of control was strongly related to leisure activities and retirement satisfaction, leisure activities were only weakly related to retirement satisfaction. Additional analysis also showed that while "Then" work involvement was strongly related to leisure activities, it was not related to retirement satisfaction.

Apparently, retirees with an internal locus of control "Now" spent more time in leisure activities and experienced

higher retirement satisfaction than external locus of control retirees. In addition, subjects high in work involvement "Then" spent more time in leisure activities than subjects low in work involvement, while no relationship between work involvement and retirement satisfaction existed. However, the relationship between the amount of time spent in leisure activities and retirement satisfaction was of modest, but insignificant magnitude. Because a prior inverse relationship between activity after retirement and mortality has been established by Cameron and Persinger (1983), it seems plausible that a relationship between amount of activity and retirement satisfaction would exist.

Theoretical Implications

As noted in Chapter 1, previous studies in the retirement literature are inconclusive in their findings. This fact is due, in part, to the wide variety of subjects and measuring devices employed. In order to accurately measure retirement satisfaction, it is necessary to use appropriate subjects and measures.

Previous research has relied heavily upon using employees, some as young as in their twenties, as subjects when measuring attitudes toward retirement and commitment to work. Obviously, any findings, significant or not, would have limited

external validity. One would not expect a 28 year-old employee to have the same work commitment or attitude toward retirement as a 58 year old employee. Even if a relationship between work commitment and retirement satisfaction existed for the 58 year-old, it could be nullified by including a 28 year-old in the same sample. The implication, therefore, is to use retirees or near retirees as subjects in retirement research. The present study chose to use retirees.

Another contribution made by this study is using measuring devices that are germane to the subjects being studied. For example, some of the questions regarding work on the Jenkins Activity Survey, Type A scale, are not relevant when testing retirees and had to be omitted. Reid and Ziegler (1980) made an important contribution to this effort when they designed the Desired Control Measure, with the older person in mind, to assess locus of control.

Chapter 1 mentioned that few studies have investigated the change in work involvement, Type A behavior, and locus of control after retirement. For the few that have, a consensus of findings does not exist on the subject of stability. As a result, this study explored the stability of these individual difference variables by employing a "Then/Now" design method. Based on the the results reported in Chapter 4, Table 1, page 46, as a group, subjects' amount of work involvement, Type A behavior, and locus of control apparently changed over time.

For example, the number of persons with an internal locus of control increased between the "Then" and the "Now" measure. This finding is contrary to that found by Lao (cited in Birren, Cunningham, & Yamamoto, 1983). Lao, using Rotter's (1966) Internal vs. External locus of control, found that internal locus of control did not change from middle- to old age.

This final theoretical implication, the acknowledgement of the dynamic nature of these previously-believed stable personality characteristics, is perhaps the most important because of its implications for practice.

Practical Implications

The basic premise of this study was that high work-involved, Type A behavior, external locus of control persons would experience less retirement satisfaction than low work-involved, Type B behavior, internal locus of control persons. Even though this premise was only partially supported, there are several implications to practice.

In this context, the first and most important implication is that preretirement planning aimed at increasing retirement satisfaction is not necessary for everyone. Seventy-five percent of the participants in the study were classified as being highly satisfied with their retirement. Therefore, workshops might want to focus selectively on the minority that

will need help in adjusting to their retirement. Preretirement planning approaches should be developed for those having different central life interests, behavior patterns, and loci of control.

Because no relationship was found in this study between work involvement and retirement satisfaction, high work-involved employees need not necessarily be encouraged to become more socially involved in their families and community before retirement. Presently, practitioners engaged in retirement planning programs tend to encourage high work-involved persons to seek out a wide variety of nonwork activities and to perceive these activities as more work-like. The practitioners hope that these new patterns of behavior will carry over into their retirement and have a positive effect on their satisfaction with retirement. The results of this study do not support such an approach.

The absence of statistical significance attests to the absence of any significant relationship between Type A behavior and retirement satisfaction. Therefore, it is not necessary to reduce Type A traits even though moderate success in modifying Type A behavior has been found by trying to change Type A's belief systems (Ubell, 1990). In addition to self-observation,

> Type A's also learn to practice physical and mental relaxation. They examine their thought processes to get rid of illogical thoughts that lead to hostility. They practice avoiding confrontations with co-workers and family members (p. 6).

All this work may not be necessary.

In this study, a strong relationship between locus of control and retirement satisfaction was demonstrated. Maybe, preretirement counseling programs should emphasize the detection and modification of the person's locus of control through control-enhancing interventions. The data in this study indicate that this focus on locus of control is more important than work involvement and Type A behavior because the latter are not related to retirement satisfaction. Therefore, preretirement counselors should be made aware of this fact and attempt to increase opportunities for reinforcement, and thus expectancies, in persons with an external locus of control. Additionally, preretirement training programs might want to assist those externally-controlled older workers in decreasing the importance of events that they feel little control over. Abel and Hayslip (1987b) suggest channeling expectancies that are currently associated with work into alternate sources. These alternate sources would then provide similar purposefulness and meaning in retirement.

Limitations

Every research study has its limitations, and the present study is no exception. The major limitations were sample size, method of data collection, method of analysis, and design

method. Because the sample size was small in this study, the external validity of the findings is limited. Although the power was adequate for the correlational analysis (i.e., alpha = .80, (Cohen, 1988)), the power was insufficient for the R-squared increment (Appendix C). Additionally, owing to the homogeneous nature of the sample (i.e., middle- to upper-class, white collar, caucasians), this even further limits generalizability.

The method of data collection could also be considered a limitation. All data were collected via self-report questionnaire, and as a result, common method variance may have caused the variables to appear more related than they actually are. An additional criticism of self-reports is the tendency for subjects to bias their answers to provide the researchers with favorable results (Howard et al., 1979). Collecting similar, yet additional, data via interviews would avoid the problem of common method variance, and at the same time, increase the accuracy of the relationships between work involvement, Type A behavior, locus of control, and retirement satisfaction. Unfortunately, it is difficult, if not impossible, to measure personality variables objectively.

Given the heavy reliance on correlational analyses in this study, this presents another limitation because it is not possible to draw causal inferences from the data. For example, just because a relationship was found between locus of control

and retirement satisfaction, this does not imply that an internal locus of control causes higher retirement satisfaction than an external locus of control. It should also be mentioned that correlational procedures limit internal validity. In order to increase the internal validity of the findings, future research of this kind should attempt to use multivariate procedures.

Another problem with the study described here is the design method. The "Then/Now" method of measurement requires recall information and the assumption that retirees' descriptions of their former attitudes are accurate. Because the average length of time retired was ten years for the participants in this study, the retirees' retrospective perceptions of their work involvement, Type A behavior, and locus of control before retirement may not be correct. Consequently, attributional problems resulting from memory distortions should not be ignored. Another problem associated with this retrospective pre-post approach is the response-style effects mentioned earlier under method of data collection. Obviously, a longitudinal study would have been a better design for testing the hypothesized relationships. However, for the purpose of this research, the "Then/Now" design was deemed more feasible, both financially and timewise.

Future Research

The results of the present study offer several suggestions for future research. Clearly, longitudinal research is needed to determine if and how work involvement, Type A behavior, and locus of control change over time. In addition, while there has been considerable retirement research employing experience-perception correlations (e.g., Fillenbaum, 1971; Glamser, 1976; Goudy et al., 1975a; McGee et al., 1979), there has been little research employing experience-experience correlations (e.g., Hooker & Ventis, 1984; Schmitt et al., 1979). The former research is necessary when investigating attitudes, such as toward retirement, but the latter is important because experienced feelings are more accurate than attitudes. Attitudes may change with education and/or experience. Therefore, more research needs to be conducted which utilizes experience-experience correlations. In the meantime, the difference between attitudes toward retirement and retirement satisfaction need to be examined.

Future retirement research should also attempt to replicate the relationship between locus of control and retirement satisfaction found in this study. If similar results can be obtained using other retirees, then preretirement programs should begin helping external preretirees to increase their sense of control.

Furthermore, there are a number of variables not included in this study which may be related to retirement satisfaction. Rabinowitz and Hall (1977) recommend studying variables such as family involvement, company and product involvement, and community, religious, and recreational involvement. Only by identifying variables related to retirement satisfaction can effective interventions for increasing retirement satisfaction be developed.

In conclusion, the present study examined the hypothesized relationships between work involvement, Type A behavior, locus of control, and retirement satisfaction. Although the participants in the study did not experience low retirement satisfaction, this fact should not deemphasize the importance of studying ways to increase satisfaction with retirement.

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APPENDIXES

APPENDIX A

INTRODUCTORY LETTER

Industrial-Organizational Psychology Program
408 Stokely Management Center
The University of Tennessee
Knoxville, TN 37996-0545
Telephone: (615) 974-3161

October 24, 1989

This letter is to invite you to participate in a study on retirement. Retirement is a major event in our life cycle and is considered the most important event for older workers. For many, retirement marks the beginning of a time in which family and leisure take on new meanings and become more important than work.

In order to investigate some of these changes in priorities brought about by retirement, a team of researchers at the University of Tennessee would like to survey retirees. This is not a test; there are no right or wrong answers. Your participation would involve completing a questionnaire about your past and present feelings on a wide variety of topics. Your responses to this survey will be kept strictly confidential.

Completing this survey is voluntary and takes approximately 40 minutes. Should you decide to participate, it is important to complete the survey early, by October 31, and return it in the self-addressed stamped envelope provided. However, if you decide not to participate, please return the blank questionnaire as soon as possible in the envelope provided.

Results from the survey will be available in approximately ten weeks. You may receive a summary of results by writing "copy of results requested" on the back of the return envelope, and printing your name and address below it. Please do not put this information on the questionnaire itself.

Thank you very much for taking the time to participate in this study. Your responses will greatly benefit the research project because without your assistance, this study would not be possible. If you have any questions, please feel free to call me at (615) 974-3161.

Sincerely,

Julie A. Davis

Julie Davis
Principal Investigator

John W. Lounsbury

John Lounsbury, Ph.D.
Project Director

P.S. We need your help in this study. Could you please send it in promptly?

APPENDIX B

SURVEY

Part 1 Work Involvement

Below are a number of statements you may agree or disagree with depending on your own personal evaluation of work in general (that is, paid employment). Please indicate the degree of your agreement or disagreement with each statement by using the following scale to circle the appropriate number.

Beside the "NOW" row, answer the statements as to how you presently feel. Next, beside the "THEN" row, answer the statements as to how you would have answered them when you were working full-time (that is, before you retired).

	1 *Strongly Disagree*	2 *Disagree*	3 *Undecided*	4 *Agree*	5 *Strongly Agree*

Example: Happiness in life comes mainly through work.

NOW	1	2	(3)	4	5
THEN	1	2	3	(4)	5

1. The most important things that happen in life involve work.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

2. Work is something people should get involved in most of the time.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

3. Work should be only a small part of one's life.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

4. Work should be considered central to life.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

5. In my view, an individual's personal life goals should be work-oriented.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

6. Life is worth living only when people get absorbed in work.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

Part 2 Personal Style Issues

For each question below, mark the answer that best describes you by circling the letter of the appropriate response. Mark only <u>one</u> answer in the "NOW" column and <u>one</u> answer in the "THEN" column for each question.

Remember, in the "NOW" column, answer the statements as to how you <u>currently feel</u>. Next, in the "THEN" column, answer the statements as to how you would have answered them <u>when you were working</u> full-time (that is, before you retired).

Example: Do (Did) you ever have trouble finding time to get your hair cut or styled?

NOW	THEN
a.	(a.) Never
(b.)	b. Occasionally
c.	c. Almost always

---

1. Is (Was) your everyday life filled mostly by

NOW	THEN
a.	a. problems needing solution?
b.	b. challenges needing to be met?
c.	c. a rather predictable routine of events?
d.	d. not enough things to keep me interested or busy?

2. When you are (were) under pressure or stress, what do (did) you usually do?

NOW	THEN
a.	a. Do (Did) something about it immediately
b.	b. Plan(ned) carefully before taking any action

3. Ordinarily, how rapidly do (did) you eat?

NOW	THEN
a.	a. I am (was) usually the first one finished.
b.	b. I eat (ate) a little faster than average.
c.	c. I eat (ate) at about the same speed as most people.
d.	d. I eat (ate) more slowly than most people.

4. Has (Had) your spouse or a friend ever told you that you eat (ate) too fast?

NOW	THEN
a.	a. Yes, often
b.	b. Yes, once or twice
c.	c. No, never

Part 2 continued

5. When you listen(ed) to someone talking, and this person takes (took) too long to come to the point, how often do (did) you feel like hurrying the person along?

NOW	THEN
a.	a. Frequently
b.	b. Occasionally
c.	c. Almost never

6. How often do (did) you actually "put words in the person's mouth" in order to speed things up?

NOW	THEN
a.	a. Frequently
b.	b. Occasionally
c.	c. Almost never

7. If you tell (told) your spouse or a friend that you will (would) meet somewhere at a definite time, how often do (did) you arrive late?

NOW	THEN
a.	a. Once in a while
b.	b. Rarely
c.	c. I am (was) never late.

8. Do (Did) you consider yourself to be

NOW	THEN
a.	a. definitely hard-driving and competitive?
b.	b. probably hard-driving and competitive?
c.	c. probably more relaxed and easy going?
d.	d. definitely more relaxed and easy going?

9. Would your spouse or closest friend rate (have rated) you as

NOW	THEN
a.	a. definitely hard-driving and competitive?
b.	b. probably hard-driving and competitive?
c.	c. probably more relaxed and easy going?
d.	d. definitely more relaxed and easy going?

10. Would your spouse or closest friend rate (have rated) your general level of activity as

NOW	THEN
a.	a. too slow--should be (have been) more active?
b.	b. about average--busy most of the time?
c.	c. too active--should (have) slow(ed) down?

Part 2 continued

11. Would people who know (knew) you well agree that you have less energy than most people?

NOW	THEN
a.	a. Definitely yes
b.	b. Probably yes
c.	c. Probably no
d.	d. Definitely no

12. How is (was) your temper?

NOW	THEN
a.	a. Fiery and hard to control
b.	b. Strong, but controllable
c.	c. No problem
d.	d. I almost never get (got) angry.

13. How often are (were) there deadlines in your life?

NOW	THEN
a.	a. Daily or more often
b.	b. Weekly
c.	c. Monthly or less often
d.	d. Never

14. Do (Did) you ever set deadlines or quotas for yourself at work or at home?

NOW	THEN
a.	a. No
b.	b. Yes, but only occasionally
c.	c. Yes, once a week or more

15. At work or at home, do (did) you ever keep two tasks moving forward at the same time by shifting back and forth rapidly from one to the other?

NOW	THEN
a.	a. No, never
b.	b. Yes, but only in emergencies
c.	c. Yes, regularly

16. When you are (were) in a group, how often do (did) the other people look to you for leadership?

NOW	THEN
a.	a. Rarely
b.	b. About as often as they look(ed) to others
c.	c. More often than they look(ed) to others

Part 3 Life Style Issues: Desirability

There are many activities or events that happen to us in everyday living. Some of these events are more important or desirable to you than are others. Listed below are statements mentioning some of these activities or events. Please rate the extent to which each event described is desirable or not desirable to <u>you</u> by using the following scale to circle the appropriate number.

Once again, in the "NOW" row, answer the statements as to how you <u>currently feel</u>. Next, in the "THEN" row, answer the statements as to how you would have answered them <u>when you were working</u> full-time (that is, before you retired).

1	2	3	4	5
Very Undesirable	*Undesirable*	*Undecided*	*Desirable*	*Very Desirable*

1. How desirable is (was) it to you that people ask(ed) you for advice and suggestions?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

2. How important is (was) it to you that you maintain(ed) your health?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

3. Is (Was) being able to get along with people you meet (met) important to you?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

4. Is (Was) being able to arrange for outings important to you?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

5. Is (Was) being able to contact your family whenever you wish(ed) desirable to you?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

6. How important is (was) being able to spend your time doing whatever you want(ed)?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

7. Is (Was) being able to find privacy important to you?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

Part 3 continued

	1 *Very Undesirable*	2 *Undesirable*	3 *Undecided*	4 *Desirable*	5 *Very Desirable*

8. How important is (was) it that you do (did) the chores yourself without any help?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

9. Is (Was) having your friends and family visit when you invite(d) them important to you?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

10. How desirable is (was) it to you that you can (could) be active whenever you wish(ed)?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

11. How important is (was) it that you find (found) people who are (were) interested in hearing what you have (had) to say?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

12. How desirable is (was) it to you to get away from the house?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

13. How desirable to you is (was) having your family visit you?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

14. How desirable is (was) it to you to be able to help others?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

15. How important is (was) it to you that you can (could) have your friends over whenever you want(ed)?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

16. Is (Was) keeping in contact with interesting ideas desirable to you?

NOW	1	2	3	4	5
THEN	1	2	3	4	5

Part 4 Life Style Issues: Expectancy

The following are statements that may describe either yourself or the beliefs you have. Would you please respond to each statement by indicating the extent to which you agree or disagree with each statement by using the following scale to circle the appropriate number.

Remember, in the "NOW" row, answer the statements as to how you currently feel. Next, in the "THEN" row, answer the statements as to how you would have answered them when you were working full-time (that is, before you retired).

	1 *Strongly Disagree*	2 *Disagree*	3 *Undecided*	4 *Agree*	5 *Strongly Agree*

1. People tend(ed) to ignore my advice and suggestions.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

2. Maintaining my level of health strongly depends (depended) on my own efforts.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

3. It is (was) difficult for me to get to know people.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

4. I can (could) usually arrange to go on outings that I am (was) interested in.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

5. The situation in which I live(d) prevents (prevented) me from contacting my family as much as I wish(ed).

NOW	1	2	3	4	5
THEN	1	2	3	4	5

6. I spend (spent) my time usually doing what I want(ed) to do.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

7. Although it is (was) sometimes strenuous, I try (tried) to do the chores by myself.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

Part 4 continued

1	2	3	4	5
Strongly Disagree	*Disagree*	*Undecided*	*Agree*	*Strongly Agree*

8. I find (found) that if I ask(ed) my family or friends to visit me, they come (came).

NOW	1	2	3	4	5
THEN	1	2	3	4	5

9. I have (had) quite a bit of influence on the degree to which I can (could) be involved in activities.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

10. I can (could) rarely find people who will (would) listen closely to me.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

11. My getting away from the house generally depends (depended) on someone else making the decisions.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

12. Visits from my family or friends seem(ed) to be due to their own decisions and not to my influence.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

13. People generally do (did) not allow me to help them.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

14. I can (could) entertain friends when I want(ed).

NOW	1	2	3	4	5
THEN	1	2	3	4	5

15. Keeping in contact with interesting ideas is (was) easy for me to do.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

16. I am (was) able to find privacy when I want(ed) it.

NOW	1	2	3	4	5
THEN	1	2	3	4	5

Part 5 Retirement Satisfaction

Each of the following four scales describe different aspects of retirement. For each item, please indicate "Y" for yes if the item describes the particular aspect of your retirement situation, "N" for no if the item does not describe that aspect, or "?" if you cannot decide. Choose one response (Y, N, ?) for each item and write it on the blank to the left. For this part, it is only necessary to answer how you currently feel.

ACTIVITIES AND WORK:

___ Tiresome
___ Discouraging
___ Exciting
___ Good
___ Fascinating
___ Hard
___ Boring
___ Challenging
___ Interesting
___ Useless
___ Limited
___ Same thing every day
___ Creative
___ Nothing to do
___ Nothing to look forward to
___ Relaxing
___ New things to do
___ Gives sense of accomplishment

FINANCIAL SITUATION:

___ Barely live on income
___ Insecure
___ Satisfactory
___ Well off
___ Steady
___ Bad
___ Need outside help
___ Worry about it
___ High income
___ Good pension plan
___ Have to make do
___ Serious financial problems
___ No money to meet emergencies
___ Income from investments
___ Need help from children
___ Income provides luxuries
___ Self-supporting
___ Good life insurance plan

HEALTH:

___ Have a lot of minor ailments
___ Need little or no medical care
___ Feel tired all the time
___ Must be careful what I do
___ Excellent
___ Failing
___ Never felt better
___ Poor
___ Better condition than most people my age

Part 5 continued

PEOPLE YOU ASSOCIATE WITH:

___ Worried
___ Boring
___ Active
___ Sympathetic
___ Confident
___ Too quiet
___ Complaining
___ Stubborn
___ Good
___ Too slow
___ Narrow interests
___ Intelligent
___ Stimulating
___ Talk too much
___ Interesting
___ Hard to meet
___ Healthy
___ Interested in doing things

Part 6 Demographic Information

This information is needed so that group results can be tabulated. No individuals will be identified. Please circle the appropriate number or fill in the blank.

1. Your sex.
   1 MALE 2 FEMALE

2. Your present age: _____ YEARS

3. Your present marital status.
   1 NEVER MARRIED
   2 MARRIED
   3 DIVORCED
   4 SEPARATED
   5 WIDOWED

4. Which is the highest level of education that you have completed?
   1 SOME HIGH SCHOOL
   2 HIGH SCHOOL GRADUATE
   3 SOME COLLEGE
   4 TWO YEAR COLLEGE DEGREE (e.g., A.A.)
   5 FOUR YEAR COLLEGE DEGREE (e.g., B.A.)
   6 SOME GRADUATE STUDY
   7 ADVANCED DEGREE (e.g., M.A., Ph.D.)

5. What was your occupation before retirement? _____

6. Your current health.
   1 POOR 3 GOOD
   2 FAIR 4 GREAT

Part 6 continued

7. What was your approximate net family income from all sources, before taxes in 1988?
   1 LESS THAN $5,000
   2 5,000 TO 9,999
   3 10,000 TO 14,999
   4 15,000 TO 19,999
   5 20,000 TO 24,999
   6 25,000 TO 29,999
   7 30,000 TO 34,999
   8 OVER $35,000

8. Your reason for retirement.
   1 FORCED
   2 VOLUNTARY
   3 REACHED RETIREMENT AGE

9. What year did you retire? 19___

10. How many paid hours per week do you presently work?
   1 ZERO
   2 LESS THAN 5 HOURS
   3 5 TO 9
   4 10 TO 14
   5 15 TO 19
   6 20 OR MORE HOURS

11. How many paid hours per week did you work before you officially retired?
   1 LESS THAN 20 HOURS
   2 20 TO 29
   3 30 TO 39
   4 40 TO 49
   5 OVER 50 HOURS

12. Do you receive a pension?
   1 YES 2 NO

13. What are your current leisure activities, hobbies, or pursuits (including games, voluntary organization participation, church attendance, etc.)?

_____

_____

14. Altogether, how many hours per week do you spend in this (these) recreational activity(ies)? _____ HOURS

15. Are you currently holding any leadership roles in any group or organization?
   1 YES
   2 NO
   If so, please specify. _____

APPENDIX C

STATISTICAL POWER ANALYSES

APPENDIX C

STATISTICAL POWER ANALYSES

For the analyses involving the intercorrelations among the independent variables, when:

n = 66
alpha = .05, one-tailed
r = .30 (medium effect size)
power = .80
using Table 3.3.2 (Cohen, 1988, p. 87)

For the analyses involving the intercorrelations among the independent and dependent variables, when:

n = 64
alpha = .05, one-tailed
r = .30
power = .79
using Table 3.3.2 (Cohen, 1988, p. 87)

For the analyses involving multiple regressions, when:

$f^2 = sr^2_i/1 - R^2 = .05/1 - .32 = .073$
$n = L/f^2 + k + 1 = 66$
$n = L/.073 + 6 + 1 = 66$
$L = 4.31$
alpha = .05
power = .30
using Table E.2 (Cohen & Cohen, 1975, p. 477)

VITA

Julie A. Davis was born on January 1, 1963, in Valencia, Spain. She graduated with Honors from McLean High School in June, 1981. The following August, she entered James Madison University in Harrisonburg, Virginia. In the spring of 1985, Julie graduated summa cum laude with a Bachelor of Science degree in psychology.

Julie began attending the University of Tennessee in the fall of 1985, where she worked toward a Master of Science degree in Industrial/Organizational Psychology. During her assistantship, she was a graduate teaching assistant for the Management Department for the winter and spring session of 1987.

After a one year sabbatical in 1988, Julie returned to Knoxville, where for the next nine months she worked as a research intern at Martin Marietta Energy Systems in Oak Ridge, TN. While working under the direction of Dr. John Lounsbury, Julie received her Master of Science degree in Industrial/Organizational Psychology from the University of Tennessee in August, 1990.

Her interests include recruitment, selection, and user-system interface. She is a student affiliate of the American Psychological Association and the American Psychological Society.