

Variables Affecting Early Retirement

by

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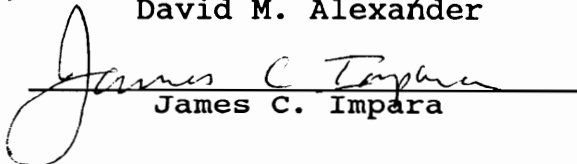
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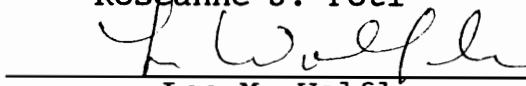
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(ABSTRACT)

The primary purpose of this study was to consider the extent to which the intent to retire early before age 65) is influenced by organizational commitment, job satisfaction, self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age and academic rank. A survey was administered to all male faculty (N=309) between 50 and 60 years of age and to the department heads of the respondents at a comprehensive research university. Complete data sets were received from 48% of the respondents (N=147).

Intent to retire early was assessed by one open ended question. The Organizational Commitment Questionnaire (Mowday, Steers, & Porter, 1979) was used to assess organizational commitment while the Specific Satisfactions scale (Hackman & Oldham, 1975) measured over-all job satisfaction. Self-perception of faculty vitality and department head's perception of faculty vitality were measured with a seven point Likert scale to determine perceived level of performance as compared to departmental

colleagues in research, teaching, and service. Retirement salary (the percentage of final salary available as a retirement benefit), age, and academic rank were provided by administrative offices on campus.

The variables were arranged in a fully recursive path model. Intent to retire early was significantly influenced by organizational commitment, retirement salary and self-perception of faculty vitality. Higher salaries and greater vitality led to a later intended age of retirement, while greater organizational commitment led to early retirement. Job satisfaction had a significant direct effect on organizational commitment. Both self-perception of faculty vitality and department head's perception of faculty vitality had significant direct effects on job satisfaction. Self-perception of faculty vitality was significantly influenced by the department head's perception of faculty vitality. Department head's perception of faculty vitality was influenced significantly by the rank of the faculty.

Results are discussed in terms of the policies that universities might implement to influence faculty to retire at a later age. These suggestions may provide alternative to the projected imbalance of faculty supply and demand. Recommendations for future research are discussed.

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CHAPTER 1

One of the serious issues facing higher education over the next decade is the possibility of a disproportionate loss of experienced faculty due to retirement (McGuire & Price, 1989). Nationally, the ranks of the professoriat increased in the 1960s when higher education expanded to accommodate the larger numbers of college-bound high school graduates. Many within the age cohort of professors who were hired during this expansion period in higher education are currently considering their options for retirement.

On January 1, 1994, the 1986 Amendments to the Age Discrimination in Employment Act of 1967 (ADEA) mandate that colleges and universities will no longer be permitted to require the retirement of tenured faculty. In Virginia mandatory retirement was rescinded on January 1, 1987 (Code of Virginia, S51-111.54.). Although the elimination of the mandatory retirement age may delay the anticipated retirement of this age cohort, recent research suggests that most faculty will continue to retire at or around age 65 (Brown, Kreiser, Rosenthal & Steiner, 1987; Calvin, 1984; Lozier & Dooris, 1987). In a study of 12 research universities, Lozier and Dooris (1987) found that the average retirement age for faculty over a five-year period

was 65.2 years, with almost no variation (standard deviation=.040) across time. A report by the Consortium on Financing Higher Education (COFHE, 1987) supports this finding with a mean retirement age of 64.88 for faculty at public institutions and 66.3 for those at private institutions.

In a study of representative liberal arts institutions, McGuire and Price (1989) projected a net loss of college faculty over the next 15 years. Twenty-nine liberal arts colleges provided data regarding mean and median ages of its faculty in various ranks, the annual rate of faculty loss from each rank for voluntary and involuntary reasons, and the anticipated annual rate of overall faculty growth over the next several years. They developed a replacement needs model which indicated that the need for faculty replacements would gradually increase over the next 15 years with peaks of relatively acute needs in the years 1996, 2000, and 2003. The annual replacement need in the year 2003 was anticipated to be 37% higher than for 1989. Most of the variability of net faculty loss was anticipated to be the result of retirement. Although this study consisted only of liberal arts colleges and resulted in a slightly higher attrition estimate than previous studies, it was consistent with other estimates of faculty attrition (Bowen & Schuster, 1986; Lozier & Dooris, 1987).

Projected increases in demand for faculty become more disturbing when combined with projected estimates of available faculty supply estimates for this same time period. Although little research has been undertaken in regard to this phenomenon, most research (McPherson, 1985; National Science Foundation, 1987; Office of Technology Assessment, 1985) agrees that the late 1990s and early years of the next century will witness reductions in the ratio of available faculty to available positions. A study of liberal arts colleges (McGuire & Price, 1989) projected a 16.25% increase in needed faculty between FY90 and FY98. In a study of 12 research universities Lozier and Dooris (1987) determined that approximately 20 percent of the 22,000 university faculty in their study will retire between 1987 and 1994, with another 30 percent retiring between 1994 and 2000. In other words, the rate of retirements will increase one and a half times. The National Center for Education Statistics (1988) predicted only a 2.97% increase in Ph.D production during that same time period. Thus, these studies suggest that the demand for faculty will exceed the supply of new Ph.Ds.

This projected shortage of faculty coincides with predicted increases in student enrollments for the 1990s. Data from the WICHE study (Western Interstate Commission for Higher Education, Teachers Insurance and Annuity Association, and The College Board, 1988) indicate that the

first significant recovery from the early-1990s enrollment decline will begin in 1995 and continue into the next century. McGuire and Price (1989) suggested that the faculty replacement needs for the 1990s and beyond projected in their study may underestimate the need if the quality of instruction and research at these institutions is to be maintained or enhanced.

One strategy suggested by both McGuire and Price (1989) and Lozier and Dooris (1987) to cope with this projected imbalance of faculty supply and demand is to decrease faculty attrition, particularly by extending the actual retirement age of faculty. However, it is not clear what universities can do to delay retirement for vital faculty since it is not known what policy manipulable factors in the work environment influence faculty to retire early.

BACKGROUND

The phenomenon of employee turnover or exit from the work place has been the subject of extensive study. Since 1912 when Crabb (cited in Muchinsky & Morrow, 1980) first studied turnover, researchers from many disciplines have attempted to understand, explain, and predict the issues involved in turnover behaviors. Although retirement is one factor that leads to turnover in an organization, retirement has not been considered as a factor in the decision to leave

an organization, since retirement at a specific age has previously been mandated.

In 1977, Mobley proposed a model of turnover that allows for the assessment of psychological and economic factors that impinge upon the decision-to-quit process. Although the Mobley model recognized both economic and psychological factors, it placed emphasis on the latter. The model further suggested an intermediate linkage system to explain the relationship between job satisfaction and turnover. Subsequent research has supported the linkages proposed in Mobley's model (Miller, Katerberg, & Hulin, 1979; Mobley, Horner, & Hollingworth, 1978; Mowday, Koberg, and McArthur, 1984). These studies correlated the variables age, tenure, perceived job satisfaction, thinking of quitting, intention to search for another job, and intention to quit the present job, with actually leaving the job. In these studies, the best predictor of actual turnover was intention to quit. The effect of job dissatisfaction was on thinking of quitting and intentions rather than on turnover itself.

While it has been suggested that the projected imbalance in faculty supply and demand might be decreased by delaying the retirement of experienced faculty (McGuire & Price, 1989; Lozier & Dooris, 1982), a concern has been expressed that such a plan might be detrimental to the university if weak faculty were retained.

PURPOSE OF STUDY

Higher education is faced with a potential imbalance of faculty supply and demand. One strategy that has been suggested to alleviate this shortfall is to delay the actual retirement of faculty. However, this may create a decline in the quality and productivity of universities if weak faculty are retained (McGuire & Price, 1989; Lozier & Dooris, 1987). There is currently scant research that indicates what policy manipulable variables are integral to the faculty member's decision to retire at a particular age. Therefore, the purpose of this study was to consider the extent to which the intent to retire early is influenced by organizational commitment, job satisfaction, self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age, and rank.

ASSUMPTIONS

There were two major assumptions underlying the conduct of this study: (a) that a faculty member's intent to retire is influenced by the interaction between the faculty member and the work environment, as defined by the variables in this study; and (b) faculty members between 50 and 60 years of age are considering the age at which they expect to retire.

RESEARCH QUESTIONS

1. To what extent do organizational commitment, job satisfaction, self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age, and rank influence the intent to retire early?

2. To what extent do job satisfaction, self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age, and rank influence organizational commitment?

3. To what extent do self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age, and rank influence job satisfaction?

4. To what extent do department head's perception of faculty vitality, retirement salary, age, and rank influence the self-perception of faculty?

5. To what extent do retirement salary, age, and rank influence the department head's perception of faculty vitality?

6. Do faculty members who exhibit higher vitality intend to retire earlier than faculty members who exhibit lower vitality?

SIGNIFICANCE OF STUDY

The importance of studying the interrelationship between the criterion and predictor variables has both theoretical and applied relevance. The theoretical application of the information obtained can be helpful in expanding turnover theories to include decisions regarding retirement as a form of turnover. Studies have shown that attitudes about leaving before actual leaving occurs are crucial to understanding turnover behavior. Investigation into the factors that influence the intent to retire early may provide additional insight into the determinants of such behavior.

The applied relevance of this study is the potential to identify policy manipulable variables that will provide guidance to colleges and universities that seek to enhance the work environment in ways that will increase the number of vital professors who will continue working beyond the conventional retirement age. It will also provide information on the performance levels of faculty who intend to retire early, which will be useful in further

investigation of the overall impact of retirement on the university.

DEFINITION OF TERMS

1. Anticipated age of retirement - The age at which the faculty member expects to retire.
2. Rank - The professorial position of the faculty member, either assistant, associate, or full professor.
3. Job Satisfaction - "A pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences. (Locke, 1976, p.1300).
4. Organizational Commitment - The strength of an individual's identification with and involvement in a particular organization. It is characterized by three factors: a strong belief in, and acceptance of, the organization's goals and values; a readiness to exert considerable effort on behalf of the organization; and a strong desire to remain a member of the organization (Porter, Steers, Mowday, & Boulian, 1974).
5. Vitality - Encompasses the teaching, research, and service contributions of the faculty member to the

university, but does not attempt to weight or identify these components individually (Clark and Lewis, 1985).

6. Retirement Salary - Percentage of the final salary that the faculty receives at the time of his retirement in the form of Virginia State Retirement Service funds, excluding social security and any other retirement plans that the faculty member may have.
7. Faculty Member - All male faculty between 50 to 60 years of age who are engaged in teaching, research, and service to the university.
8. Early Retirement- Retirement before age sixty-five.

LIMITATIONS

The study was limited to male faculty members at a large, comprehensive research university in the southeast. Only males were selected since there were only 20 female faculty members in this cohort group. Although variables that appear important to the work environment were selected for this study, it is recognized that other variables, both in the work environment and extraneous to this environment (such as, health, family, and other financial circumstances) may have an influence on the faculty member's decision to

retire. Finally, this study was limited to one large research university which may limit the generalizability of the results.

CHAPTER 2

The serious shortfall of experienced faculty members in higher education in the next two decades predicted by researchers is primarily the result of the retirement of a large number of professors who were hired in the 1960s and to a projected increase in enrollments (McGuire & Price, 1989). The dramatic increases in faculty hiring from 1963 through 1968 were a consequence of the growth of established colleges and universities and the staffing needs of many new public and proprietary institutions.

To further exacerbate the projected imbalance in the faculty supply and demand, a decline in the number of doctorates granted during the next 15 years is anticipated (McGuire & Price, 1989). In addition, the enrollment of undergraduate students during this time period is expected to increase significantly as anticipated enrollments recover by 1996 from the early-1990s slump and continue to rise into the next century (WICHE, 1988).

There is some concern that this imbalance in the supply and demand will result in a reduction in the quality of higher education if faculty members are encouraged to delay retirement to decrease the shortfall (McGuire & Price, 1989). One of the more important aspects of the quality of higher education is the vitality of its faculty. The Planning Council of the University of Minnesota (1980)

defined the vitality of a faculty member as reflecting a sustained productivity in teaching, research, and service activities and it does not attempt to weight or identify each of these components individually (cited in Clark & Lewis, 1985). In light of the projected shortage of faculty, the retirement of faculty members who remain vital may be a doubly negative event for the college or university since (a) the university will lose a vital faculty member and (b) such a loss will exacerbate the faculty shortage.

EMPLOYEE TURNOVER

Retirement is considered a major source of turnover or exit from an organization, but, because of previous retirement policies, retirement has not been considered in studies of turnover that attempted to determine the factors that cause persons to leave an organization. An intermediate linkage system to explain the relationship between job satisfaction and turnover was proposed by Mobley (1977). This model allows for the assessment of multiple alternatives as various types of psychological and economic factors impinge upon the decision-to-quit. Figure 1 illustrates the expanded turnover model of Mobley, Horner and Hollingsworth (1978).

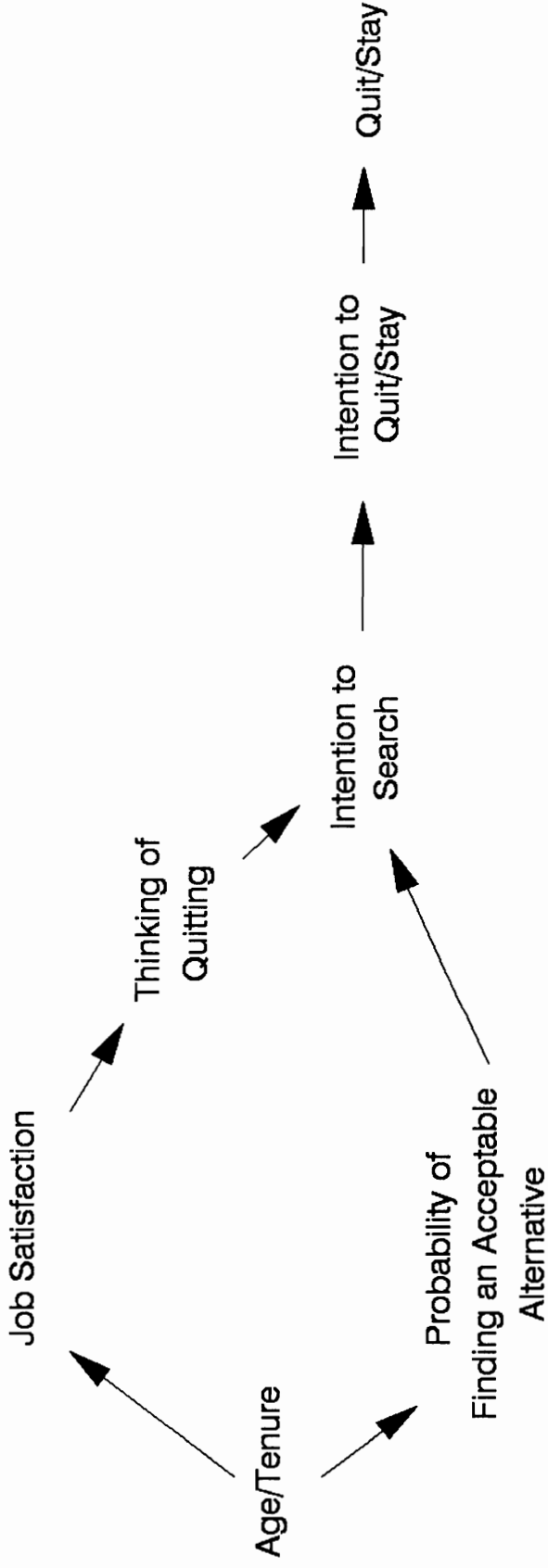


Figure 1. Mowday, Porter, and Hollingsworth Model of Turnover (1978)

The Mobley model has been empirically tested by comparing variables such as age, tenure, and perceived job satisfaction with the variables thinking of quitting, intention to search for another job, intention to quit the present job, and actual turnover (Mobley, Horner, & Hollingsworth, 1978). The best predictor of actual turnover was intention to quit. The effect of job dissatisfaction was on thinking of quitting and intentions rather than on turnover itself. Mobley, et al. (1978) also recognized the importance of search-related variables and the perceived availability of acceptable job alternatives in explaining turnover.

Results that were consistent with the linkages proposed in the Mobley (1977) model were reported by Miller, Katerberg, and Hulin (1979). They found that measures of job satisfaction, thoughts of quitting, intention to search for an alternate job, intention to quit, age, tenure, and perceptions of job opportunities were related to the reenlistment decision of two military samples. This simplified version of Mobley's 1977 model has received additional support from research reported by Hom, Griffeth, and Sellaro (1979) and Mowday, et al. (1984).

In the current study, the intent to retire early represents the intent to quit factor. Since this study attempts to explain the personal characteristics, attitudes

and behaviors that influence the decision to retire, the intent to retire was selected as a variable, rather than the actual act of retiring. Additional factors that may be influential in the intent to retire early were added to the concepts in the Mobley et al. model.

INTENT TO RETIRE EARLY

Intent to retire early, rather than actual retirement, was selected as a variable in this study since the university must have a predictor variable regarding anticipated retirement if it desires to alter policy manipulable variables that may delay the retirement of vital professors. The theory of attitudes proposes that "the best single predictor of an individual's behavior will be a measure of his intention to perform that behavior" (Fishbein & Ajzen, 1975, p.369).

Intent represents the single best predictor of turnover (Kraut, 1975; Mobley, et al., 1978; Price & Mueller, 1981). The use of intention to stay/quit has been the final cognitive step in the decision making process in all of the work on Mobley's model. Mobley's work has followed March and Simon (1958) and Fishbein and Ajzen (1975) to hypothesize that job satisfaction has only an indirect effect on actual turnover acting through intentions to quit or stay.

ORGANIZATIONAL COMMITMENT

Organizational commitment is a construct considered more global than job satisfaction, since it is an affective reaction to the organization rather than specifically to the job. Organizational commitment has been defined and operationalized in three different ways by researchers. The first definition flows from Becker's early work on the idea of "side bets" (1960), in which individuals venture some unrelated aspect of their lives on continued membership in the organization. Commitment is a function of the rewards and costs associated with organizational membership. These rewards and costs typically increase with tenure. According to this definition, the greater the favorability of the exchange from the member's perspective, the greater the commitment to the organization by the member.

The second definition of organizational commitment focuses on behaviors that result in the attribution of commitment. These attributions are made in part to maintain the consistency between one's behavior and attitudes. Salancik (1977) has stated that behaviors that are explicit (undeniable), irrevocable, volitional, and public bind the individual to the behavior and therefore cause greater commitment. Organizational commitment has been linked to acts that the individual engages in during the job choice process (O'Reilly & Caldwell, 1980).

The third definition of commitment concerns itself with processes of identification and the dedication of one's own energies to the organization's goals and values.

Organizational commitment is defined as the strength of an individual's identification with and involvement in a particular organization. Furthermore, it is characterized as having three factors: (a) a strong belief in, and acceptance of, the organization's goals and values; (b) a readiness to exert considerable effort on behalf of the organization; (c) and a strong desire to retain membership in the organization (Porter, Steers, Mowday, & Boulian, 1974). The psychological approach of Porter, et al. (1974) depicts a decidedly positive, high-intensity orientation toward the organization. This approach includes, but goes beyond the hesitancy-to-leave component that is the fundamental dimension of the side-bets or exchange definition of organizational commitment (Morris & Sherman, 1981). Organizational commitment is not a mere passive loyalty to an organization. It reflects an active relationship with the organization in which the individual is willing to give something of himself to the organization.

The present study has utilized the Porter et al. (1974) definition of organizational commitment since it encompasses the relationship of a faculty member with a university. The three factors in this model, belief in goals and values, willingness to exert effort, and desire to retain membership

reflect to some extent the tenure process in most universities. The faculty member must accept and believe in the goals and values of the institution and then perform to meet those expectations to retain his membership in the institution.

Low organizational commitment has been significantly related to turnover, whereas high organizational commitment has been related to staying in an organization (Angle & Perry, 1981; Clegg, 1983; Hom, Katerberg, & Hulin, 1979; Mowday, et al., 1984; Mowday, et al., 1979; Porter, Crampon, & Smith, 1976; Porter et al., 1974; Steers, 1977). Organizational commitment also increases over time (Werbel & Gould, 1984). As a predictor of turnover, organizational commitment has accounted for as much as 34 percent of the variance (Hom, et al., 1979) and as little as 3 percent (Michaels & Spector, 1982). Inconsistencies across previous studies may be due to a combination of three reasons: (a) the way organizational commitment has been conceptualized and operationalized (Steers & Porter, 1979), (b) the way turnover has been conceptualized and operationalized (Price, 1977), or (c) the result of statistical artifacts such as sampling and measurement errors (Hunter, Schmidt, & Jackson, 1982).

Organizational commitment has been reported to be a better predictor of turnover than job satisfaction (Koch & Steers, 1976); Porter et al., 1974). Further,

organizational commitment should be somewhat more stable than job satisfaction over time (Mowday, et al., 1979), since job satisfaction reflects the more immediate reactions to specific and tangible aspects of the job that are more susceptible to change (Porter, et al. 1974; Smith, Kendall, & Hulin, 1969).

JOB SATISFACTION

Job satisfaction is defined as a "pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1300). Overall job satisfaction refers to the satisfaction of the job as a whole, not to specific aspects of the job, such as pay, autonomy, opportunities for advancement, supervision, etc. The satisfaction of college and university faculty members has been studied since the late 1960s by using models that are based on studies of motivation and satisfaction in government and industry (Finkelstein, 1978). Eighty-five percent of the faculty in one study indicated that overall they were satisfied or very satisfied with their position, a result almost identical to responses to the same question in 1968 but a drop from 93 percent in 1956 (Willie & Stecklein, 1981).

Satisfaction and Performance

Other studies pertinent to the current research have considered factors in the work environment that are either antecedents or outcomes of job satisfaction. As an example, it has been reported that more varied and demanding tasks in the job result in greater job satisfaction than routine, repetitive activity (Guest, 1957). The relationship between job satisfaction and job performance continues to intrigue investigators. Several summaries of this relationship have appeared (Brayfield & Crockett, 1955; Herzberg, Mausner, Peterson, & Capwell, 1957; Srivastava et al, 1975; Vroom, 1964). Each review attempted to integrate the inconsistencies among individual study results by concluding that there is not a strong relationship between workers' job satisfaction and productivity. In a review of 29 studies, Vroom (1964) reported a median correlation of +.14 and a range of +.86 to -.31. A meta-analytic study that was confined to studies that reported only JDI (Job Descriptive Index) measures of satisfaction or overall job satisfaction measures and job performance suggested that the performance-satisfaction relationship may be moderated by job level between entry level personnel, middle managers, and professional/upper management personnel (Petty, McGee, & Cavender, 1984). Professional and upper management personnel exhibited a consistently higher job performance and job satisfaction relationship. This meta-analysis included

considerably more professional/upper management personnel than most other studies.

In a continuing attempt to delineate this relationship, Iaffaldano and Muchinsky (1985) also did a meta-analytic study of the relationship between job satisfaction and job performance in which 74 empirical studies published in 70 articles, with a subject sample size of 12,192 provided a total of 217 satisfaction-performance correlations. They reported that:

"(a) the best estimate of the true population correlation between satisfaction and performance is relatively low (.17); (b) much of the variability in results obtained in previous research has been due to the use of small sample sizes, whereas unreliable measurement of the satisfaction and performance constructs has contributed relatively little to this observed variability in correlations; and (c) nine research design characteristics of a study are only modestly related to the magnitude of the satisfaction-performance correlation that will be obtained "(p. 251).

Satisfaction and Organizational Commitment

The attitudes of job satisfaction (Brayfield & Rother, 1951; Brooke, Russell, & Price, 1988; Locke, 1976) and organizational commitment (Brooke, et al, 1988; Mowday et

al., 1979; Steers, 1977) have been considered to be distinct concepts. A review by Clegg (1983) noted that satisfaction and organizational commitment have been the most frequently studied components of turnover, yet the two concepts were not usually included in the same studies of turnover and therefore, the causal relationship between job satisfaction and organizational commitment was unclear. Williams and Hazer (1986) reanalyzed data from Michaels and Spector (1982) and Bluedorn (1982) and reported the importance of satisfaction and commitment as intervening variables in models of turnover. They found in both samples that personal and organizational characteristics influence satisfaction directly, but influence organizational commitment only indirectly through their influence on satisfaction which subsequently influences organizational commitment directly. The researcher added a cautionary note that the results may have been influenced by the use of cross-sectional data to assess directionality.

An analysis of longitudinal data of 449 subjects in a military setting provided partial support for Williams and Hazer's 1986 model which posited satisfaction and commitment as intervening variables in turnover. (Farkas & Tetrick, 1989). The relationship among satisfaction, commitment, and reenlistment intention changed with increased tenure in the military. The time periods for test administration occurred at (1) the end of recruit training, about 2 months

into the enlistment; (2) about 8-10 months after the beginning of recruit training; and (3) about 20-21 months after the beginning of recruit training. The causal direction between satisfaction and commitment changed with satisfaction influencing commitment at the first and third measurements, but with commitment influencing satisfaction at the second measurement time. It was suggested that the relationship between satisfaction and commitment may be cyclical or reciprocal (Farkas & Tetrick, 1989). The sample in this study had an average age of 19 at the time of enlistment, had signed on for a 4-year enlistment period, and were predominantly single and Caucasian. The results of this study may not be generalizable to an older, civilian population.

In the current study, overall job satisfaction with the position of faculty member in a large research university will be assessed. The Specific Satisfactions developed by Hackman and Oldham (1975) will be adapted for use with these respondents.

Faculty Vitality

In this study vitality represents a performance measure that relates to the research, teaching, and service factors in a professor's job. Two measures of vitality were assessed: (a) self-perception of faculty vitality and (b) department head's perception of faculty vitality.

Self-perception of vitality, which reflects the faculty member's assessment of his own vitality, is based on the theory of adjustment equity. The theory of adjustment equity assumes that individuals attempt to place themselves in the same ordinal position on a scale of outcomes as they perceive themselves to occupy on a scale of merit. This suggests that individuals have a pretty good idea of where they stand in an organization, relative to their talents and the talents of others in the organization (Birnbaum, 1983; Mellers, 1982).

The department head is a member of the faculty member's role set or relevant social system. As a member of the relevant social system, the department head is dependent upon the faculty member's performance in some specific ways: he/she is rewarded by it; judged in terms of it; or it is required in order for the department head to perform his/her own job. Therefore, the department head has a stake in the performance of the faculty member and develops beliefs and attitudes about what the faculty member should and should not do as a part of his/her role. These perceptions of the role expectations of the faculty member that are held by the department head are designated role expectations (Katz & Kahn, 1966). The role expectations held for the faculty member by the department head reflect the head's conception of the person's position and abilities.

The department head, as a member with a specified role in the organization, has an occupational identity that includes evaluating the faculty members in his department (Graen, 1976). In the current study, the department head's perception of the faculty member's vitality represents the current performance of the faculty member's vitality in teaching, research, and service.

RETIREMENT SALARY

Another theory of turnover which places an emphasis on economic factors was proposed by Price (1977). He provides an inventory of four turnover determinants that are presumed to influence a person's decision to discontinue employment. These determinants include pay, participation in primary groups, communication, and centralization. Price further proposes that two intervening variables of an economic nature, opportunity and net balance of benefits over costs, serve to mediate the relationship between these determinants and turnover. For the purposes of this study the retirement salary represents the net balance of benefits over costs in Price's model of turnover. A faculty member considers the benefits of staying with the university versus the costs of leaving the university and the results become a part of the information he uses to determine at what age he will retire. The retirement salary represents the percentage of final

salary that a faculty member receives from the Virginia State Retirement System.

The benefits of a particular institutional retirement program (Lozier & Dooris, 1987) or high levels of inflation, or expectations of high levels of inflation (Brown, Kreiser, & Steiner, 1987) appear to be instrumental in determining the age of retirement for many faculty members. It seems that such factors will continue to be important predictors of intended age of retirement irrespective of the elimination of the mandatory retirement age (Lozier & Dooris, 1987).

In a study of all full-time faculty members at the University of California who were eligible to retire between 1968 and 1974, current employees who were aged 45 to 67, and recent retirees, the intent to retire and reflections on previous retirement was considered (Patton, 1977). Male retirees who would retire later if they had the choice to make again, tended to be persons with living standards both worse than expected and much lower than before retirement. Among then current employees in this study, 13% indicated that if they were financially able they would retire. The majority of respondents (60%) cited the mandatory retirement age as the primary factor that would cause them to retire. The most often cited requirement for an early retirement was a larger early retirement annuity.

In this study, an economic factor that may influence the intended age of retirement is represented by the retirement salary. Retirement salary is the percentage of the final salary that will be provided as retirement income from the state retirement system for faculty. This variable does not reflect any other financial investments or benefits that may be available to individual faculty members. This measure is applicable to all respondents in this study.

AGE

Higher education is experiencing a shift in the age distribution of its faculty. For example, the average age of the faculty in Virginia has increased at an accelerated rate in recent years. From 1966 to 1981 the mean age of the faculty in public institutions increased from 40 to 43 years of age (an average increase in the mean age of .20 years per year). However from 1981 to 1988 the mean age increased at a rate of .43 per year, to a mean age of 46 years (State Council of Higher Education in Virginia, 1989).

The end of a mandatory retirement age in 1994 will allow faculty members to remain active for as long as they wish (1988 Amendments to the Age Discrimination in Employment Act of 1967). Current available evidence indicates that faculty do not intend to retire early (Clark & Lewis, 1985). Unpublished results of a national survey

conducted in 1981 by Hansen and Holden (cited by Clark & Lewis, 1985), indicated that faculty 56 to 64 years of age expected to retire at 66.4 years of age, while faculty 62 to 64 years of age expected to retire at 66.7 years of age. In this same study there was little evidence to support a perceived shift toward early retirement in higher education since only 21 percent of the faculty members who were 56 to 61 (those not yet eligible for social security benefits) expected to retire prior to reaching age sixty-five. Reimers's (1977) studies (cited by Clark & Lewis, 1985) comparing expected age of retirement with actual age of retirement found that the intended age of retirement is most often below the actual age of retirement.

Age/Vitality

While prevailing prejudice may hold that faculty vitality decreases with age, this is largely a questionable assumption that may be challenged on the basis of available evidence. Research indicates that (a) scholarly productivity does not necessarily decrease with increasing age, (b) relationships between productivity and age vary by fields and disciplines, (c) scholarly productivity does not necessarily decline monotonically, but rather for most disciplines appears to have two peaks, and (d) any simple effects of aging appear to be small for most faculty members under retirement age (Clark & Lewis, 1985).

Wald and Avolio (1986) conducted a meta-analytic review of 40 samples that included data regarding the relationship between age and performance. The types of performance measures were used to classify the research: (a) peer ratings, (b) supervisory ratings, and (c) individual productivity. Results indicated a pattern of increases in performance with age as measured by productivity indices. Individual productivity was maintained or increased with age to a greater extent for professionals than for nonprofessionals. Conversely, supervisory ratings indicated a slight tendency to be lower for older employees.

A recent meta-analytic review of 22 years of articles published in 46 behavioral science journals reported on 96 independent studies that indicated age-performance correlations (McEvoy & Cascio, 1989). Findings suggested that age and job performance are generally not related. Additionally, the type of performance measure (ratings or measures of productivity) or the type of job (professional or nonprofessional) had little effect on the relationship between age and performance. It was noted that as the work force ages, the need for more research on the 50 to 70 year-old age cohort will become increasingly important.

RANK

In a study that considered the differences in cost, tenure ratio, and faculty flow that result from the changed mandatory retirement ages, Bottomley, Linnell, and Marsh (1980) suggested that rank may have a greater impact upon anticipated faculty retirements than changes in the mandatory retirement age. A study of faculty at the University of California reported a moderate positive correlation of rank with age at retirement. Fifty-three percent of the lecturers and 85% of the associate professors retired early, as contrasted to 38% of the full professors (Patton, 1977).

PROPOSED MODEL

The purpose of this study was to consider the extent to which the intent to retire early is influenced by organizational commitment, job satisfaction, self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age, and rank. Some of the policy manipulable factors that influence the faculty's intent to retire early were evaluated.

The proposed model (Figure 2) includes the following predictor variables: two personal characteristics - age and rank; two work-related variables - job satisfaction and

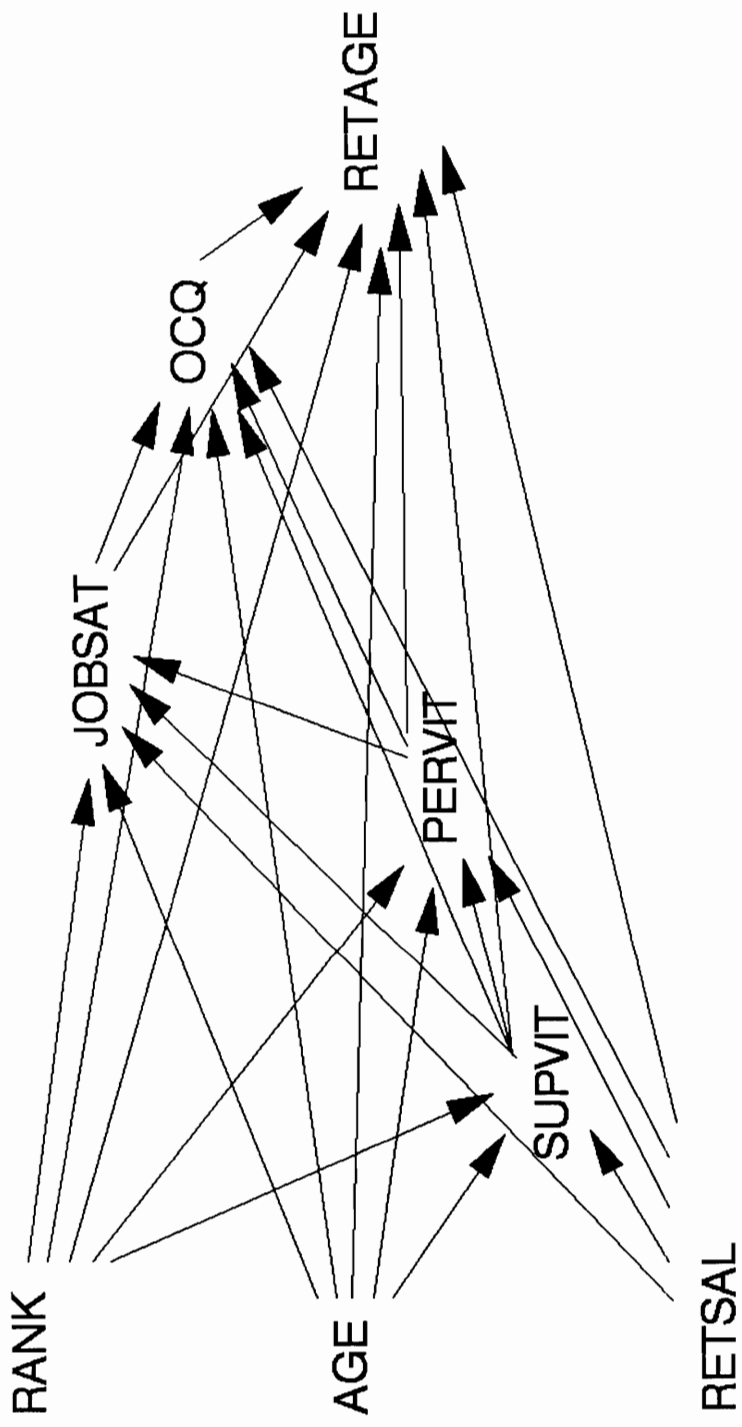


Figure 2. Path Diagram of the Intent to Retire Early

organizational commitment; two measures of vitality - self-perception of faculty vitality, and department head's perception of faculty vitality; an economic factor - retirement salary; and the criterion variable, intent to retire early. The three exogenous variables are: age, rank and retirement salary; while the four endogenous variables are: organizational commitment, job satisfaction, self-perception of faculty vitality, and department head's perception of faculty vitality. This model was influenced particularly by the work of Mobley, Horner, and Hollingsworth (1979).

The predicted imbalance in faculty supply and demand in the next two decades is the result of: (1) a large cohort of faculty who were hired in the 1960s, during the expansion years of higher education who are reaching the expected retirement age of 65; (2) a reduction in the number of doctorates that are predicted for the next 15 years; and (3) a recovery from the enrollment declines of the early 1990s, which will coincide with the retirement of the large cohort of faculty. One approach to resolving this imbalance is to delay the retirement of faculty, an alternative made possible by the end of mandatory retirement. However, there is some concern that this resolution may affect the overall quality of the faculty.

The current study has been influenced by the Mobley model of turnover (1977) which identified a system of

intermediate linkages between variables that impinge upon the decision to quit. The best predictor of actual turnover was intention to quit. In this study, the intent to retire early was substituted for the intent to quit factor in the Mobley model.

Low organizational commitment has been significantly related to turnover. The causal relationship between job satisfaction and organizational commitment has been unclear, although it appears that job satisfaction influences organizational commitment directly, which in turn directly influences the intent to leave an organization. Job satisfaction has only an indirect effect, through organizational commitment, on the intent to leave. The job satisfaction - performance relationship has been unclear, although this relationship may be moderated by job level with professional personnel exhibiting consistently higher job performance and job satisfaction relationships.

Self-perception of faculty vitality is based on the theory of adjustment equity which assumes that individuals attempt to place themselves on a scale of merit that reflects their talents as compared with that of their colleagues. The department head's perception of the faculty member's vitality reflects the role expectation of the department head for the faculty member. The department head's occupational identity includes evaluating faculty in his/her department.

One of the most important predictors of the intended age of retirement is the financial benefits that will be available at retirement. Faculty demographics have changed in recent years. The mean age of faculty has increased substantially in the last decade while there is little evidence to support a shift toward early retirement in higher education. The simple effects of aging on most faculty under retirement age appear to be very small indicating that age and job performance are not generally related. Rank has been moderately correlated with age at retirement.

CHAPTER 3

DESIGN OF THE STUDY

The purpose of this study was to consider the extent to which the intent to retire early is influenced by organizational commitment, job satisfaction, self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, current age and rank. Early retirement was defined as retirement before 65 years of age. The study involved the administration of two surveys; one to the faculty members and the other to the department heads of faculty who agreed to have their department head participate. The first survey for faculty was composed of the 14 item Specific Satisfactions scale of the Job Diagnostic Survey (Hackman & Oldham, 1975), the Organizational Commitment Questionnaire (Mowday, et al. 1979), a measure of the faculty member's perception of his own vitality, and a single item response measure to determine the intended age of retirement (see Appendix A). The personal characteristics of age and rank were provided by the office of institutional research while the retirement salary was provided by the employee benefit office. The second survey, which was mailed to the department head with the permission of faculty included in the study, included a measure of the department head's perception of the faculty

member's vitality (see Appendix B). These measures of faculty vitality were developed by the researcher.

POPULATION OF THE STUDY

The population consisted of all male full-time, tenured faculty members at a comprehensive research university in the southeast who were 50 to 60 years of age. This institution has not had a mandatory retirement age since January 1, 1987 (Code of Virginia). The decision to place a lower limit on the age range of faculty members was consistent with the finding by Reimers (1977) that the younger the faculty member, the lower the correlation between the expected age of retirement and the actual age of retirement. Only faculty members who were engaged in university teaching, research, and service were included in the population. Library personnel, research associates, extension agents, and administrators were excluded from the study. A total of 309 males met all of these criteria. Due to the small number of women in this age cohort at this institution (N=20), only the 309 men were requested to participate in the study.

INSTRUMENTATION

Job Satisfaction

Overall job satisfaction was measured by the 14 item Specific Satisfactions developed by Hackman and Oldham (1975). It consists of the following specific satisfactions: Pay (two items), Job Security (two items), Social (three items), Supervisory (three items) and Growth Satisfaction (four items). The psychometric properties of the scale were reported for the subscales. Spearman-Brown reliability for the subscales were: pay, .86; security, .73; social, .64; supervisory, .87; and growth, .84. The median intercorrelation for the four sub-scales was $r=.42$ with a range of .29 to .47. The growth satisfaction sub-scale was correlated more highly with pay ($r=.43$), security ($r=.51$), social ($r=.57$), and supervisory satisfaction ($r=.55$) (unpublished, Oldham, Hackman & Stepina, 1978, cited in Cook, Hepworth, Wall, & Warr, 1981). The items were altered for this study to make the questions more applicable to the sample. The word "supervisor" was replaced with "department head or chair" (Appendix A). These items were answered on a 1-7 Likert scale from "extremely dissatisfied" to "extremely satisfied". The scores on all 14 items were averaged to obtain an overall job satisfaction score. The psychometric properties of the job satisfaction score will be discussed in Chapter 4.

Organizational Commitment

Organizational commitment was measured by the Organizational Commitment Questionnaire (OCQ) which is a standardized scale developed by Mowday, Steers, and Porter (1979). It contains 15 items which are answered on a seven point Likert scale from "strongly disagree" to "strongly agree". Six of the OCQ items (17, 21, 23, 25, 26, 29) are negatively phrased and required reversed scoring (Appendix A).

The psychometric properties of the OCQ have been reported in a review of nine samples of differing populations by Mowday et al. (1979) in which the mean level of commitment ranged from a low of 4.0 to a high of 6.1 with a median of 4.5. The standard deviations ranged from .64 to 1.30 around a median of 1.06. Cronbach's coefficient alpha ranged from .82 to .93 with a median of .90 across the nine samples. A sample of faculty members at two universities had a mean of 4.2 with a standard deviation of 1.04 (Koroloff, 1985; 1986). Cronbach's coefficient alpha in the same study was .8968 for the 15 item OCQ.

Faculty Vitality

Faculty vitality was assessed by two measures, self-perception and department head's perception. Each faculty member and department head responded to the same three questions regarding the faculty member's vitality. The

faculty member or department head rated the faculty member's performance in the areas of university research, teaching, and service as compared to other members of the department (Appendix A). The wording for the questions was changed to reflect the self-perception of faculty vitality and the assessment of the department head, but the questions were the same contextually. These items were answered on a 1-7 Likert scale from "exceptionally low" to "exceptionally high". The three items on the department head's survey were averaged to obtain the department head's perception of faculty vitality and the three questions on the faculty survey were averaged to obtain a measure of self-perception of vitality.

Intent To Retire Early

Intent to retire early rather than actual retirement was selected as a variable since the university must understand anticipated retirement if it is to identify policy manipulable variables that will guide policy regarding the work environment that will increase the number of vital professors who continue working beyond the conventional retirement age. Early retirement is defined as retirement before the age at which all retirement benefits are available to the faculty member. In this study early retirement occurs before the age of 65 when full social

security benefits and other retirement benefits are available to the faculty member.

Retirement Salary

The retirement salary for each faculty member was obtained from the employee benefit office at the institution where this study was conducted. The current salary, expected year of retirement, and the expected rate of increase in salary (5%) were used in a predictive model (Martin, 1989) to determine the expected yearly salary at retirement. The retirement salary reflects the percentage of the final yearly salary that will be paid as the Virginia state retirement plan for each faculty member. This retirement benefit accrues to each of the members in this study. Other retirement benefits, including social security and TIAA-CREF, are not included in this measure, since those measures were not applicable to all members of the sample.

Age and Rank

The personal characteristics of the population were provided by the office of institutional research at the institution where the research was conducted. The age of the faculty members ranged from 50 to 60 years of age. The rank of the faculty members was either full, associate, or assistant professor. All faculty members were tenured.

DATA COLLECTION PROCEDURES

Data for the study were obtained through the use of two self-administered surveys that were mailed in the university mail system. One survey was mailed to the faculty member (see Appendix A), and the other was mailed to the head of the department of those faculty members who granted that permission to the researcher (see Appendix B). The formats for the surveys were developed by using portions of Dillman's (1978) guidelines. Each of the surveys was typed on 8 1/2 X 11 inch sheets that were printed on the front and back to create a booklet of four pages. The traditional cover letter was typed on the front of the booklet to reduce the overall bulkiness of the mailing envelope.

The cover letter explained the nature of the study, and emphasized the importance and usefulness of the proposed research. It also assured confidentiality, reminded respondents of the importance of each individual's response and cooperation, and appealed for an expedient return of the completed survey. Each letter was signed in blue ink by the researcher. The letter to the department heads was signed by the Interim Provost.

The first survey was sent to all members of the population (Appendix A). At the top of the survey were two informed consent releases. The first informed consent

statement granted the researcher permission to use the responses in a confidential manner. The second informed consent granted the researcher permission to request that the department head provide information regarding the vitality of the faculty member in regard to his teaching, research and service activities.

The survey which was sent to the faculty members (Appendix A) consisted of four sections: job satisfaction, organizational commitment, self-perception of faculty vitality, and the age at which he expected to retire. Job satisfaction and organizational commitment were measured by using previously established indexes. The measures of self-perception of vitality and expected age of retirement were developed by the researcher.

The second survey, which was sent to the department head of respondents who gave permission, consisted of three questions regarding the department head's perception of the faculty member's vitality in research, teaching, and service (Appendix B). These measures were developed by the researcher.

The questions were formatted to permit ease of reading and responding. Questions were typed in upper and lower case letters and answers were all upper case. Along with the survey, a pre-addressed inter-office envelope was included.

One week after the instrument was mailed, a thank-you/reminder note was mailed to each person via the university mail system. The postcard thanked respondents if they had already returned the survey and appealed to those who had not done so to complete and return it immediately. The importance of each individual's response was stressed once again. If they had not received a survey, they were asked to contact the researcher by telephone and a survey was mailed to them. The researcher signed each one with blue ink.

MODEL

Previous research has suggested that certain factors in the work environment such as job satisfactions, and organizational commitment have been influential in studies of turnover (Mobley et al., 1978; Miller, et al., 1979; Hom et al., 1979; Mowday, et al., 1984; Williams & Hazer, 1986) and it was therefore posited that they may exert an influence on the faculty member's choice of age of retirement. In addition, an economic consideration, such as the retirement salary, is an important consideration in decisions regarding the age of retirement (Patton, 1977). Measures of vitality, such as department head's perception of faculty vitality and self-perception of vitality may also influence the decision to retire early (Birnbaum, 1983; Katz

& Kahn, 1966; Mellers, 1982). And finally personal characteristics, including age and rank (Bottomly, et al., 1980), may be influential factors in this decision making process.

A causal model was developed to study the relationships of variables in the work environment, economic considerations, personal characteristics, vitality measures, and the intent to retire early. These factors were identified from previous studies as being important to the intent to elect early retirement. A recursive model was developed to consider the impact of these factors on the faculty's member's intent to retire early (Figure 3).

The identified factors discussed above were intercorrelated with one another and were therefore arranged in a fully-identified recursive model. There is a logical temporal order underlying the arrangement of the variables in the model. As indicated by the model, earlier influences impact later factors but later factors cannot affect earlier influences; the model assumed a unidirectional flow of effects.

The model that was tested in this study (Figure 3) proposed that the dependent variable, intent to retire early (RETAGE), was a function of these seven predictor variables: RANK, AGE, RETSAL (retirement salary which is an economic

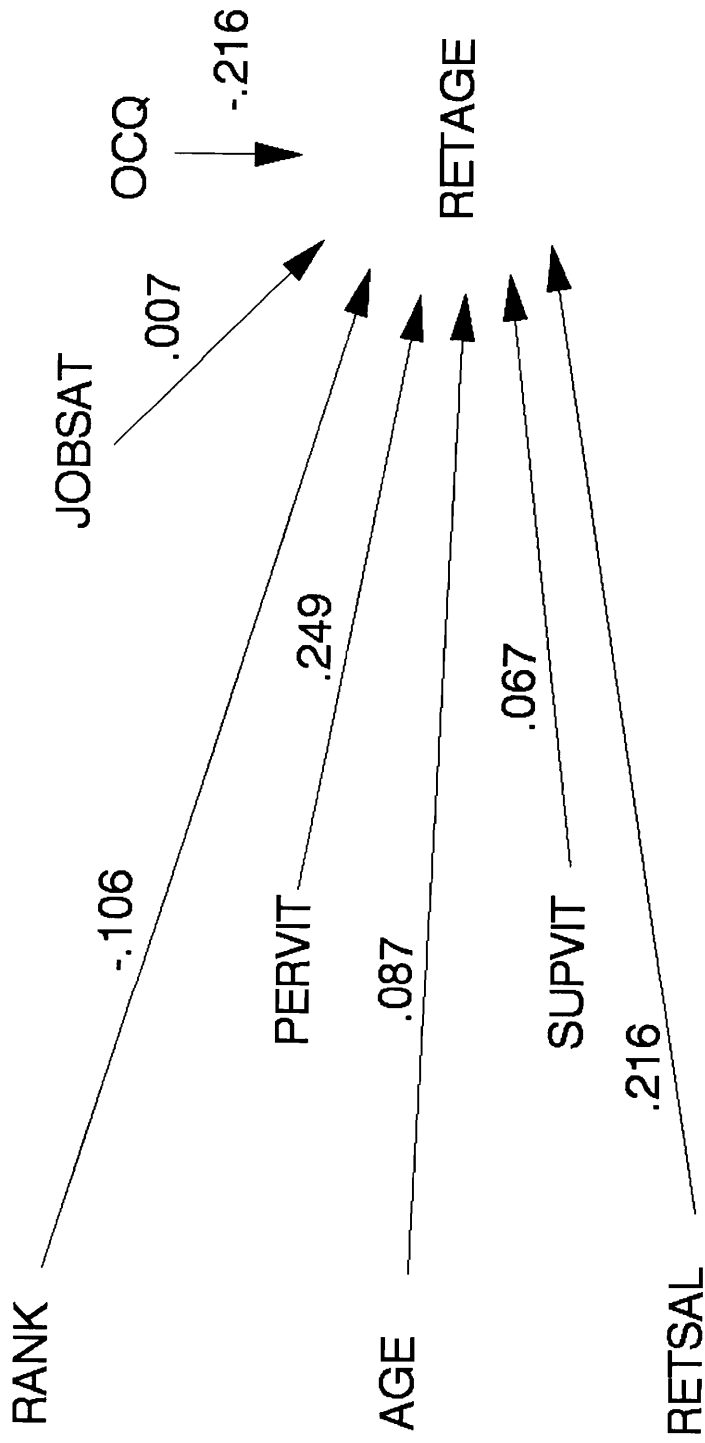


Figure 3. Causal Model of Intent to Retire Early (Path Coefficients)

indicator of the percentage of final salary that will be available after retirement), SUPVIT (department head's perception of faculty vitality), PERVIT (self-perception of faculty vitality), JOBSAT (job satisfaction), and OCQ (organizational commitment). The first three variables were exogenous variables so the causes of their variation lay outside the model. The remaining four variables were endogenous variables whose causes lay within the model. The endogenous variables were both causes and effects in different structural equations. Each of the four endogenous variables in the model was considered to be caused by all of the exogenous variables and those endogenous variables that preceded it in the model. The dependent variable, intent to retire early, was seen as dependent on all seven preceding variables, RANK, AGE, RETSAL, SUPVIT, PERVIT, JOBSAT, AND OCQ.

STATISTICAL ANALYSIS

Path analysis was used as the main statistical method to address the primary research question in the study: What are the direct and indirect effects of the independent variables as posited by the causal model on the intent to retire early. Using the SPSSX statistical package (1986), frequencies, percentages, means, and standard deviations were used to examine the descriptive profile of

the respondents and non-respondents. Faculty rank, age, years of service, and highest degree obtained provided a descriptive profile of respondents and non-respondents. Cronbach's alpha coefficients of internal consistency were obtained by using SPSSX for JOBSAT, OCQ, PERVIT, and SUPVIT. Using the SPSSX PEARSON CORR option, Pearson product moment correlation coefficients (r) were produced and used to evaluate relationships among the variables of the model. Later analyses were based on this correlation matrix. The matrix was examined for multicollinearity among the predictor variables.

Path analysis was used to examine the relationships and effects described by the model which was developed from theory. Path analysis involves the estimation of the path coefficients for the variables given supposed cause and effect relationships in the model. Pedhazur (1982) has defined path analysis as, "a method for studying direct and indirect effects of variables hypothesized as causes of variables treated as effects" (p.580). The proposed model was estimated by use of the computer program GEMINI (Wolfle & Ethington, 1985). The GEMINI program uses ordinary least squares regression to estimate the coefficients of the structural equations that define the model. Each endogenous variable was regressed on all exogenous variables and causally antecedent endogenous variables. This procedure yielded several sets of partial

regression coefficients which represented the direct effects of the causal factors on the dependent variables in the equations. Indirect effects and their standard errors are calculated by this program when one variable affects another variable through intervening variables. The sum of the direct and indirect effects represent the total effects.

SUMMARY

The data for this study were obtained from two surveys that were mailed to faculty members and the department heads of faculty who granted their permission. These data were then analyzed using the SPSSX statistical package to obtain descriptive statistics, reliability estimates, and Pearson product moment correlations. The GEMINI program was used for the path analysis on the proposed model.

The proposed model consisted of three exogenous variables: RANK, AGE, and RETSAL; four endogenous variables: SUPVIT, PERVIT, JOBSAT, and OCQ; and one dependent variable: RETAGE. This model was tested to determine the direct, indirect, and total effects of these variables on the intent to retire early.

CHAPTER 4

The purpose of this study was to consider the extent to which the intent to retire early is influenced by organizational commitment, job satisfaction, self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age and rank. Relevant data for this study were acquired through two surveys, one to male faculty between 50 and 60 years of age and a second to the department heads of respondents who granted this permission; and information from the offices of Institutional Research and Employee Benefits.

DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Of the 309 male faculty members between the ages of 50 to 60, 170 persons returned their survey for a return rate of 55%. Of that number 147, 48% of the total and 87% of the returned surveys, granted permission to request information from their department head regarding the department head's perception of faculty vitality. A response rate of 48% falls within the 18 to 57% range found in previous studies of university faculty (Everett & Entrekin, 1980; Hunter, Ventimiglia & Crow, 1980; Locke, Fitzpatrick, & White, 1983; Nicholson & Miljus, 1972; Taylor, Locke, Lee, & Gist, 1984).

TABLE 1

Rank of Respondents and Nonrespondents

| | Full Professor | Associate Professor | Assistant Professor | Total |
|----------------|-------------------|------------------------|------------------------|-------|
| Respondents | 112 | 54 | 4 | 170 |
| Nonrespondents | 84 | 46 | 9 | 139 |
| Total | 196 | 100 | 13 | 309 |
| | $\chi^2=.064$ | df=2 | p>.05 | |

TABLE 2**Highest Degree of Respondents and Nonrespondents**

| Group | Ph.D. | Masters or Less | Total |
|-----------------------|---------------|----------------------------|--------------|
| Respondents | 161 | 9 | 170 |
| Nonrespondents | 122 | 17 | 139 |
| Total | 283 | 26 | 309 |
| | $\chi^2=3.91$ | df=1 | p<.05 |

TABLE 3**Years of Service of Respondents and Nonrespondents**

| Group | N | M | S.D. |
|-----------------------|--------------|---------------|-----------------|
| Respondents | 170 | 18.535 | 7.492 |
| Nonrespondents | 139 | 17.755 | 7.366 |
| | t=.92 | df=307 | p>.05 |

TABLE 4
Age of Respondents and Nonrespondents

| Group | N | M | S.D. |
|----------------|------------|------------|-----------|
| Respondents | 170 | 54.318 | 2.764 |
| Nonrespondents | 139 | 54.612 | 3.305 |
| | $t = -.85$ | $df = 307$ | $p > .05$ |

The respondents were compared with the non-respondents on the demographic variables rank, highest degree obtained, years of service at the university, and age (Tables 1-4). As can be seen from the data in these tables, there were no significant differences between the respondents and nonrespondents on three of the measures. The highest degree earned was significantly different for the respondents and non-respondents. It may be that non-respondents without a terminal degree did not respond since it was not an anonymous survey. They may have felt somewhat threatened by the sensitivity of the questions. It is assumed that the sample used for this study is representative of the population, although a possibility of bias exists.

The respondents represent the following eight colleges or centers: Agriculture (21.8 %), Architecture (2.4%), Arts and Sciences (32.4%), Business (4.1%), Education (13.5%), Engineering (19.4%), Human Resources (1.8%), Veterinary Medicine (2.4%), and the Center for Public Administration and Policy (2.4%). Data are combined for all colleges and centers.

VARIABLES

Three exogenous variables were a part of the model. These variables were operationally defined as follows:

1. Rank: coded 1 = assistant professor, 2 = associate, 3 = full professor.
2. Age: coded 50 to 60.
3. RETSAL: the percentage of the final salary that would be paid as a VSRS retirement benefit. Range = 9 % to 80%.

The four endogenous variables posited by the model were department head's perception of faculty vitality (SUPVIT), self-perception of faculty vitality (PERVIT), job satisfaction (JOBSAT), and organizational commitment (OCQ). These variables were operationally defined as follows:

4. SUPVIT: department head's perception of the faculty member's vitality in research, teaching, and service. Three questions were averaged for an overall score of vitality. Cronbach's coefficient alpha for the scale was .57. All three questions were significantly correlated with each other ($p < .01$).

5. PERVIT: the faculty's self-perception of his own vitality in research, teaching, and service. Three questions were averaged for an overall score of vitality; Cronbach's coefficient alpha for the scale = .30. Teaching and service were significantly correlated ($p < .05$), but research was not significantly correlated with teaching or service.
6. JOBSAT: the satisfaction of the faculty member with his job. Fourteen items were averaged for an overall job satisfaction score; Cronbach's coefficient alpha for the scale = .90.
7. OCQ: the organizational commitment of the faculty. Fifteen items were averaged for an overall organizational commitment score; Cronbach's coefficient alpha for the scale = .89.

Finally, the dependent measure was the intent to retire early which was operationally defined as follows:

8. RETAGE: the intended retirement age of the faculty member. A single open-ended response measure was used. The responses were coded: 1 - 64 = 0 (early retirement); 65 - 87 = 1 (late retirement); never = 1; don't know = missing.

CORRELATIONS AMONG THE VARIABLES OF THE MODEL

The means, standard deviations, and intercorrelations among the variables of the model are presented in Table 5. Four variables (AGE, RETSAL, PERVIT, and OCQ) were significantly correlated with the dependent variable RETAGE. A higher age was related to an earlier retirement age ($r=-.157$). A higher retirement salary was related to a later retirement age ($r=.202$). Likewise a higher self-perception of faculty vitality was related to a later retirement age ($r=.198$). Organizational commitment was negatively correlated with retirement age ($r=-.147$), indicating that faculty with greater commitment intend to retire earlier. Although these correlations are significant, they are low correlations.

The values of the intercorrelations among the variables ranged from .000 (between RETSAL and PERVIT) to .640 (between JOBSAT and OCQ). RANK was significantly correlated with OCQ ($r=.194$) which indicates that full professors feel more organizational commitment than assistant professors. Rank was also significantly and positively correlated with JOBSAT ($r=.193$), PERVIT ($r=.191$), SUPVIT ($r=.312$), and AGE ($r=.197$) which indicated that full professors had higher responses on these measures than faculty at other ranks.

TABLE 5

Means, Standard Deviations and Inter-correlations Among Variables (N = 147)
Pearson Correlation Coefficients

| Variable | M | SL | AGE | RETSAL | SUPVIT | PERVIT | JOBSAT | OCQ | RETAGE |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. RANK | 2.635 | .530 | .197** | .048 | .312** | .191** | .193** | .194** | -.084 |
| 2. AGE | 54.318 | 2.764 | | -.023 | -.064 | -.093 | -.018 | .077 | -.157 |
| 3. RETSAL | 45.157 | 12.567 | | | -.066 | -.000 | .031 | .047 | .202** |
| 4. SUPVIT | 4.626 | 1.154 | | | | .306** | .313** | .131 | .089 |
| 5. PERVIT | 5.151 | .920 | | | | | .389** | .292** | .198** |
| 6. JOBSAT | 5.543 | .858 | | | | | | .640** | -.025 |
| 7. OCQ | 4.822 | .940 | | | | | | | -.147* |
| 8. RETAGE | .643 | .481 | | | | | | | |

* p < .05

** p < .01

SUPVIT was significantly and positively correlated with JOBSAT ($r=.313$) and PERVIT ($r=.306$), which indicated that higher perception of faculty vitality by the department head was correlated with greater job satisfaction, and self-perception of faculty vitality. PERVIT was also significantly and positively correlated with JOBSAT ($r=.389$) and OCQ ($r=.292$). Higher self-perception of faculty vitality was correlated with job satisfaction and organizational commitment. JOBSAT was significantly correlated with OCQ ($r=.640$). Greater job satisfaction was correlated with a higher degree of organizational commitment.

An SPSSX procedure (XTX) was used to test for multicollinearity among the independent variables. It was concluded that multicollinearity did not pose a threat to the validity of the results and analyses that were based on the zero order correlation matrix.

Estimation of the Model

The model was estimated using the program GEMINI (Wolfle & Ethington, 1985), which required the correlation matrix, means, standard deviations, sample size, and control cards that defined the equations in the model. The following five structural equations in which each endogenous variable was regressed on the exogenous variables and all

other causally antecedent endogenous variables in the model were required:

1. $RETAGE = OCQ + JOBSAT + PERVIT + SUPVIT + RETSAL + AGE + RANK$
2. $OCQ = JOBSAT + PERVIT + SUPVIT + RETSAL + AGE + RANK$
3. $JOBSAT = PERVIT + SUPVIT + RETSAL + AGE + RANK$
4. $PERVIT = SUPVIT + RETSAL + AGE + RANK$
5. $SUPVIT = RETSAL + AGE + RANK$

Two types of coefficients were identified from these five structural equations. Standardized regression (beta) weights can be interpreted as direct effects, controlling for all other variables in the model. The amount of change in the dependent measure for every unit standard deviation increase in the predictor variable, holding constant the influence of all other predictors, is reflected by the size and sign of the standardized regression weight (Pedhazur, 1982). Table 6 contains the standardized regression coefficients for each of the structural equations.

The second coefficients were metric or unstandardized regression (b) weights. The amount of change in the dependent measure for every one-unit increase in the predictor variable, holding constant the influence of all other predictors is indicated by the size and sign of the unstandardized regression weights. Unstandardized coefficients are more meaningful and provide more substantive interpretation when effects in two samples are

TABLE 6
Standardized Regression Weights For All Structural Equations

| Variable | SUPVIT | PERVIT | JOBSAT | OCQ | RETAGE |
|----------------|--------|--------|--------|--------|--------|
| 1. RANK | .339** | .131 | .067 | .077 | -.106 |
| 2. AGE | -.131 | -.103 | .012 | .073 | -.087 |
| 3. RETSAL | -.025 | -.007 | .029 | .024 | .216** |
| 4. SUPVIT | | .259** | .196* | -.107 | .067 |
| 5. PERVIT | | | .318** | .071 | .249** |
| 6. JOBSAT | | | | .632** | .007 |
| 7. OCQ | | | | | -.216* |
| 8. RETAGE | | | | | |
| R ² | .11** | .12** | .20** | .43** | .15** |

* p < .05
** p < .01

TABLE 7

Unstandardized Regression Weights For All Structural Equations
(Number in parentheses is the standard error)

| Variable | SUPVIT | PERVIT | JOBSAT | OCQ | RETAGE |
|-----------|-----------------|-----------------|----------------|-----------------|-----------------|
| 1. RANK | .738 (.175) | .227 (.149) | .109 (.133) | .136 (.124) | -.096 (.078) |
| 2. AGE | -.055 (.034) | -.034 (.027) | .004 (.024) | .025 (.022) | -.015 (.014) |
| 3. RETSAL | -.002 (.007) | .000 (.006) | .002 (.005) | .002 (.005) | .008 (.003) |
| 4. SUPVIT | | .207 (.067) | .146 (.062) | -.086 (.058) | .028 (.037) |
| 5. PERVIT | | | .296 (.075) | .072 (.073) | .130 (.046) |
| 6. JOBSAT | | | | .692 (.078) | .004 (.061) |
| 7. OCQ | | | | | -.110 (.053) |
| 8. RETAGE | | | | | |

TABLE 8
Indirect Effects on Intent to Retire Early

| Variable | Standardized | Unstandardized ¹ | |
|----------|--------------|-----------------------------|--------|
| RANK | .039 | .035 | (.036) |
| AGE | -.052 | -.009 | (.005) |
| RETSAL | -.013 | .000 | (.001) |
| SUPVIT | .048 | .020 | (.016) |
| PERVIT | -.056 | -.030 | (.018) |
| JOBSAT | -.136 | -.076 | (.038) |

¹Standard error (metric) in parentheses

TABLE 9

Total, Direct and Indirect Effects (Standardized) for Intent to Retire Early (N=147)
 Dependent Variables

| Variable | SUPVIT | | PERVIT | | JOBSAT | | OCQ | | RETAGE | | | | | | |
|----------|--------|-------|--------|-------|--------|-------|------|-------|--------|-------|-------|-------|-------|-------|-------|
| Effect | T | I | T | I | T | I | T | D | I | T | D | I | | | |
| RANK | .339 | .339 | .218 | .131 | .087 | .203 | .067 | .136 | .184 | .077 | .107 | -.067 | -.106 | .039 | |
| AGE | -.131 | -.131 | -.137 | -.103 | -.034 | -.058 | .011 | -.069 | .042 | .073 | -.032 | -.139 | -.087 | -.052 | |
| RETSAL | -.025 | -.025 | -.014 | -.007 | -.007 | .020 | .02 | -.009 | .039 | -.024 | .014 | .202 | .216 | -.013 | |
| SUPVIT | | | .259 | .259 | | .278 | .196 | .082 | .086 | -.108 | .194 | .115 | .067 | .048 | |
| PERVIT | | | | | | .318 | .318 | | .272 | .071 | .201 | .193 | .249 | -.057 | |
| JOBSAT | | | | | | | | | .632 | .632 | | -.130 | .007 | -.136 | |
| OCQ | | | | | | | | | | | | | | -.216 | -.216 |

being contrasted (Pedhazur, 1982). Table 7 displays the corresponding metric (unstandardized) weights and standard errors.

Table 8 contains the indirect effects of the variables on RETAGE in both standardized and unstandardized (metric) form. To facilitate the comparison of the magnitudes of the effects, the standardized total, direct, and indirect effects are listed in Table 9. Standardized coefficients were used since they are more appropriate for the assessment of the relative importance of variables within one equation.

Direct Effects

As Table 6 indicates, the 7 explanatory variables in the model explained 15% ($p < .01$) of the variance in intent to retire early when examined as direct effects. Three variables in the model had significant direct effects on intent to retire early when all other variables in the model were held constant statistically; these were self-perception of faculty vitality (Beta=.249, $p < .01$); organizational commitment (Beta=-.216, $p < .05$) and retirement salary (Beta=.216, $p < .01$).

Indirect Effects

Table 8 contains the indirect effects of the variables on the intent to retire early. The indirect effects are the sum of products of direct effects in the causal sequence

TABLE 10

Total, Direct and Indirect Effects (Unstandardized) for Intent to Retire Early
(N=147)
Dependent Variables

| Variable | SUPVIT | | PERVIT | | JOBSAT | | OCQ | | RETAGE | | | | | | | | | |
|----------|--------|-------|--------|-------|--------|-------|------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Effect | T | D | I | T | D | I | T | D | I | T | D | I | | | | | | |
| RANK | .738 | .738 | .379 | .227 | .152 | .329 | .109 | .220 | .326 | .136 | .190 | .061 | .096 | .035 | | | | |
| AGE | -.055 | -.055 | -.045 | -.034 | -.011 | -.017 | .004 | -.021 | .014 | .025 | -.011 | -.024 | -.015 | -.009 | | | | |
| RETSAL | -.002 | -.002 | -.001 | -.001 | -.001 | .001 | .002 | -.001 | .003 | .002 | .001 | .007 | .008 | -.001 | | | | |
| SUPVIT | | | .207 | .207 | | .207 | .146 | .061 | .070 | -.088 | .158 | .048 | .028 | .020 | | | | |
| PERVIT | | | | | | .296 | .296 | | .277 | .072 | .205 | .101 | .131 | -.030 | | | | |
| JOBSAT | | | | | | | | | .692 | .692 | | | | -.072 | -.004 | -.076 | | |
| OCQ | | | | | | | | | | | | | | | | | -.110 | -.110 |

TABLE 11

Rank Ordering of Total, Direct and Indirect Effects on the Intent to Retire Early

| Rank | Variable | Total Effect | Rank | Variable | Direct Effect | Rank | Variable | Indirect Effect |
|------|----------|--------------|------|----------|---------------|------|----------|-----------------|
| 1 | RETSAL | .202 | 1 | PERVIT | .249** | 1 | JOBSAT | .136* |
| 2 | PERVIT | .193 | 2 | RETSAL | .216** | 2 | PERVIT | -.057 |
| 3 | AGE | -.139 | 3 | OCQ | -.216* | 3 | AGE | -.052 |
| 4 | OCQ | -.138 | 4 | RANK | -.106 | 4 | SUPVIT | .048 |
| 5 | JOBSAT | -.130 | 5 | AGE | -.087 | 5 | RANK | .039 |
| 6 | SUPVIT | -.115 | 6 | SUPVIT | .067 | 6 | RETSAL | -.013 |
| 7 | RANK | -.067 | 7 | JOBSAT | -.007 | 7 | | |

Note: These effects are reported in standardized form.

* p < .05

** p < .01

leading to the dependent variable (Pedhazur, 1982). Job satisfaction (Beta=-.136, $p < .05$) was the only variable which had a significant indirect effect on the dependent variable (RETAGE).

Total Effects

Total effects which indicate the influence of variables on the intent to retire early are the sum of the direct and indirect effects. Total effects (standardized and metric) are given in Tables 9 and 10. The strongest standardized effects on RETAGE were OCQ (Beta=-.216), RETSAL (Beta=.202) and PERVIT (Beta=.193). A rank ordering of the total, direct, and indirect effects appears in Table 11.

Effects of the Variables

The results of this study provided partial support for the proposed model (Figure 3). Although the model accounted for only 15% of the variance, the findings provide support for and enhance previous research and expand the knowledge of factors that influence a faculty member to intend to retire early. Three variables had a significant direct effect on the intent to retire early: organizational commitment (Beta=-.216), self-perception of vitality (Beta=.249), and retirement salary (Beta=.216). Faculty with greater organizational commitment intend to retire

earlier than faculty with less commitment. Faculty who perceive themselves to have greater vitality intend to work longer than faculty who perceive themselves to have less vitality. Likewise faculty who are eligible to receive higher benefits at retirement intend to continue working longer. It is logical that faculty with higher vitality would have received greater financial rewards than faculty with less vitality.

Studies on turnover have indicated that low organizational commitment was significantly correlated with turnover, whereas high organizational commitment was correlated with the intent to stay in an organization (Angle & Perry, 1981; Clegg, 1983; Hom, Katerberg, & Hulin, 1979; Mowday, et al., 1984; Mowday, et al., 1979; Porter, Crampon, & Smith, 1976; Porter et al., 1974; Steers, 1977). This was not the case in the present study, since high organizational commitment was significantly correlated with the intent to retire early. It may be that the intent to retire is not analogous to the intent to leave in studies of turnover. The decision to retire may be perceived to be a more permanent decision and in fact, represents a change in lifestyle, as well as a change in employment. The significant negative relationship between organizational commitment and intended age of retirement in this study may reflect the finding by Werbel and Gould (1984) that organizational commitment increased over time. In the

current study, the respondents were older and it is expected that their long tenure with the university would reflect a higher commitment. The age range in this study is restricted which does not allow consideration of this concept. As Reimers's (1978) study indicated, the closer one is to retirement, the more accurate is the intent to retire with the actual retirement age.

Organizational commitment has also been reported to be a better predictor of turnover than job satisfaction (Koch & Steers, 1978; Porter et al., 1974). The total effects of organizational commitment were significantly influential in the decision to retire. Job satisfaction did have a significant direct effect on organizational commitment (Beta=.632), which provides more support for the causal relationship posited by this study and others (Williams & Hazer, 1986).

Self-perception of faculty vitality (Beta=.318) and department head's perception of faculty vitality (Beta=.196) had significant direct effects on job satisfaction. The zero order-correlations between self-perception of faculty vitality ($r=.389$) and department head's perception of faculty vitality ($r=.313$) with job satisfaction were among the highest in the study. This finding is consistent with the study by Petty, McGee, and Cavender (1984) which suggested that the relationship between job satisfaction and job performance may be moderated by job level with

professional personnel exhibiting a consistently higher job performance and job satisfaction relationship than other levels of employees. This study consisted entirely of professional persons and the results support the previous research.

Self-perception of faculty vitality was significantly and positively influenced by the department head's perception of faculty vitality (Beta=.259). The effect of department head's perception of vitality on intended age of retirement was moderated by self-perception of faculty vitality. This appears consistent with the role the department head plays in the faculty member's professional life. Since the department head is responsible for assessing the faculty member's performance and assigning rewards based on performance (Katz & Kahn, 1966), the faculty member would be influenced by the department head's perception of the faculty member's vitality. However, it should be noted that the regression model for department head's perception of faculty vitality accounted for only 12% of the variance. Certainly other factors have an important role in the faculty member's perception of his vitality.

Department head's perception of faculty vitality was influenced significantly by the rank of the faculty member (Beta=.339). Faculty with higher ranks had higher vitality as perceived by the department heads. This seems reasonable since rank presumably reflects a certain standard of

performance, with full professors demonstrating the highest level of vitality.

Faculty vitality, as measured by both department head and self-perception, indicates that more faculty with high vitality (80%) intend to retire after age 65 (see Table 12). Faculty with low vitality as measured by both department head and self-perception are only slightly more likely to retire after age 65 (52%). It appears that faculty who consider themselves to be more vital plan to retire later than their cohorts who consider themselves less vital. Sixty-four percent of the respondents intend to retire early. The Chi-square among these groups was not significant.

TABLE 12
 Vitality by Retirement Age

| | | Retirement <65 | Retirement >65 | Total |
|----------------------------------|------|-------------------|-------------------|-------------|
| SUPVIT | Low | 12 (48%) | 13 (52%) | 25 (35%) |
| | High | 13 (28%) | 34 (72%) | 47 (65%) |
| PERVIT | | | | |
| SUPVIT | Low | 8 (33%) | 8 (67%) | 16 (25%) |
| | High | 16 (20%) | 31 (80%) | 47 (75%) |
| PERVIT | | | | |
| $X^2 = 4.931$ $df = 3$ $p > .05$ | | | | |

CHAPTER 5

If universities and colleges are to meet the challenge of maintaining and enhancing the quality of the educational experience for its students, they must understand and manipulate the variables under their control to attract and retain the finest professors possible on its faculty. Continuing research on these suggested topics will contribute to that understanding.

The primary purpose of this study was to consider the extent to which the intent to retire early is influenced by organizational commitment, job satisfaction, self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age and rank. The sample was drawn from all male teaching faculty (309) at a comprehensive research university in the southeastern United States. Two surveys were administered: the first to the faculty; and the second to the department heads of faculty who granted this permission. There were 147 complete sets of data from both surveys for a usable return rate of 48%.

Path analysis was used to determine the extent to which the predictor variables organizational commitment, job satisfaction, self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age, and rank could explain the intent to retire early. These variables, which were identified from the

literature on job turnover were arranged in a fully recursive model. The research provided the following answers to the research questions that guided the study:

Research Question 1:

To what extent do organizational commitment, job satisfaction, self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age, and rank influence the intent to retire early?

The primary question, that the model would explain a statistically significant amount of variance in intent to retire early, was supported. Three variables, organizational commitment, self-perception of faculty vitality and retirement salary had significant direct effects on the intent to retire. Both faculty members who expressed a self-perceived higher degree of vitality and those who would receive a higher retirement benefit intended to retire later. High organizational commitment was significantly related to the intent to retire early, before the age of 65, which is not consistent with previous research on turnover (Angle & Perry, 1981; Clegg, 1983; Hom, et al., 1979; Porter, et al., 1976; Porter et al., 1974; Steers, 1977).

Substantively, the results of this study are encouraging to universities and colleges that are facing a potential shortage of faculty. If the institution wishes to retain a highly productive faculty member, it appears from this study that salary, which is a policy manipulable variable that is the precursor of the retirement benefit, could be adjusted to encourage faculty to retire at a later time.

Although 15% of the variance in intent to retire early was explained, it suggests that other explanatory variables not specified in the model could be added to provide greater explanatory power. Other factors that could be important for a greater understanding of the variables that influence the intent to retire early include: the health of the faculty member; the health of other persons for whom he is responsible; other financial benefits that may be available at retirement; opportunities for employment after retirement, such as consulting work; interests in other activities, such as travel, volunteer activities, hobbies, political interests, or other personal interests; and marital status. Although these factors are not policy manipulable variables and were not pertinent to the current study, they may enhance the comprehension of the factors that influence when faculty chose to retire.

Research Question 2:

To what extent do job satisfaction, self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age, and rank influence organizational commitment?

The second question, that the variables that were antecedent to organizational commitment in the model would explain a significant amount of variance in organizational commitment was supported. Forty-three percent of the variance of organizational commitment was explained by the model. The variables in the model that were antecedent to job satisfaction (self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age and rank) influenced organizational commitment only indirectly through their influence on satisfaction which subsequently influenced organizational commitment directly. This finding supported previous work by Farkas and Tetrick (1989) and by Williams and Hazer (1986).

Research Question 3:

To what extent do self-perception of faculty vitality, department head's perception of faculty vitality, retirement salary, age, and rank influence job satisfaction?

The third question was also supported since the model to explain job satisfaction was statistically significant and accounted for 20% of the variance. Two variables in the model, department head's perception of faculty vitality, and self-perception of faculty vitality, had significant direct effects on job satisfaction. It has been suggested that the relationship between job satisfaction and vitality (performance) is a weak relationship (Brayfield & Crockett, 1955; Herzberg, et al., 1957; Srivastava et al., 1975; Vroom, 1964). However, a recent meta-analytic study suggests that overall job satisfaction and performance may be moderated by job level with professionals indicating a higher degree of job satisfaction than non-professionals (Petty, et al., 1984). The results of the current study support the concept that the job satisfaction and vitality relationship of faculty may be moderated by employment in a professional field.

Research Question 4:

To what extent do department head's perception of faculty vitality, retirement salary, age, and rank influence self-perception of faculty vitality?

The model to explain self-perception of faculty vitality was also significant but accounted for only 12% of the variance. The department head's perception of the

faculty member's vitality was the only significant variable in the model. Faculty are influenced by the perceptions of the department head, since one of the roles of the department head is to evaluate and reward faculty members (Graen, 1976). At the institution where the research was conducted, the department head is also responsible for awarding raises, which are based on a merit system that rewards or penalizes faculty for their performance in research, teaching and service. Therefore, it is likely that the faculty member's perception of his own vitality has been influenced by the perception of the department head regarding the faculty member's vitality.

Other variables that could be included in this model include: peer evaluation of vitality; teacher ratings, indices of publications, numbers of committee memberships, numbers of theses and dissertations directed, membership in professional organizations, and offices held in professional organizations. Each of these variables may have an influence on the faculty member's perception of his vitality since they reflect on his professional expertise to some degree.

Research Question 5:

To what extent do retirement salary, age, and rank influence department head's perception of faculty vitality?

This question was also supported since the relationship between rank and the department head's perception of faculty vitality was statistically significant. Full professors were perceived by department heads as exhibiting greater vitality. The department head has a role expectation for the faculty member based on his position and perceived abilities (Graen, 1976). It would be expected that faculty with higher rank meet the expectations of the department head in a more expeditious manner.

Research Question 6:

Do faculty who exhibit higher vitality intend to retire earlier than faculty who exhibit lower vitality?

The final research question is an important policy issue. With a predicted imbalance in the faculty supply and demand (McGuire & Price, 1989; McPherson, 1985; National Science Foundation, 1987; Office of Technology Assessment, 1985), it is critical to identify the trend in intended age of retirement as it relates to the vitality of the faculty. If faculty are encouraged to retire after the expected age of retirement (65 years of age) there is some concern that the quality of the educational experience could suffer as a result of retaining older, less vital professors (McGuire & Price, 1989).

The current study suggests that both the self-perception of faculty vitality and the department head's perception of faculty vitality measures indicate that faculty with higher vitality intend to retire later than faculty who have lower vitality. Department heads and faculty agreed that 75% of the faculty exhibited high vitality. Of that 75%, 80% intent to retire after age 65. This result is encouraging for colleges and universities that may be facing a shortage of faculty. It appears that a large percentage of the faculty at this institution who are considered vital will continue their tenure with the university and the quality of the institution will not decline as a result of their continued employment.

Implications

As colleges and universities enter the next decade, it is predicted that there will be a serious shortage of faculty (McGuire & Price, 1989; McPherson, 1985; National Science Foundation, 1987; Office of Technology Assessment, 1985). The current study suggests that colleges and universities should consider the possibility of encouraging vital faculty who are eligible to retire to continue their employment. There are a considerable number of faculty who could continue their activities in research, teaching and service and make a contribution to the quality of the institution.

It appears that the intent to retire may not be analogous to the intent to leave in studies of turnover, since organizational commitment was higher for faculty intending to retire early. However, older faculty who remain vital could be encouraged to retain their employment past age 65 by enhancing economic factors over which the university has control and by reinforcing faculty perceptions of their own vitality. The salary of vital faculty could be increased as they age or a performance bonus for faculty who remain vital could be paid if they continue to be employed past the expected age of employment (65 years of age). Hiring faculty with high vitality on a part-time basis would provide needed expertise to the faculty ranks, while not placing unreasonable economic demands on the university.

The results of this study suggest that faculty with high vitality are more likely to continue to work past the age of 65 if they perceive themselves to be vital or if their department head perceives them to be vital. This may also be an aspect of the intent to retire that is manipulable by the university. Older faculty with high vitality should be recognized for their expertise and rewarded for their contributions. The feedback from their department heads is particularly important in this process. As faculty with high vitality mature they could be nurtured and encouraged to retain their status in their department.

Recommendations for Future Research

If universities and colleges are to meet the challenge of maintaining and enhancing the quality of the educational experience for its students, they must understand and manipulate the variables under their control to attract and retain on its faculty the finest professors possible. Continuing research on these suggested topics will contribute to that understanding.

It is apparent that there are additional variables that should be considered in a model of the intent to retire early. As suggested earlier, the current model should be expanded to include measures regarding the health of the faculty member; the health of other persons for whom he is responsible; other financial benefits that may be available at retirement; opportunities for employment after retirement, such as consulting work; interests in other activities such as travel, volunteer activities, hobbies, political interests, or other personal interests; marital status which may encourage early or late retirement; and attitude toward retirement.

The identification of factors that would make later retirement attractive to faculty with high vitality should be explored. Such factors might include: reduced teaching loads; part-time status; preferential privileges such as free or more convenient parking spaces, free or reduced tickets for athletic and cultural events, or enhanced

library services; increased opportunities for service to the department as mentors to younger faculty and students, and special appointments as teaching or research fellows which would allow a specialization in activities that are most enjoyed by the faculty member.

Another potentially important area of research includes the attitude of faculty, students, and other staff toward older faculty. Although discrimination may not be overt, discrimination against older faculty may be a covert pressure that influences vital faculty to take early retirement.

This study was limited by the inclusion of male faculty exclusively. It would be informative to consider both genders in these studies. It is quite likely that the retirement process for men and women may differ as a result of different societal demands that may be placed upon them.

This study was also limited by reviewing data from one comprehensive research university in the southeast. A sample that includes representatives from different types of colleges and universities that are also regionally diverse would provide more generalizable information. There may be patterns of different variables that affect faculty decisions to retire that are specific to different types of colleges and universities.

It is important to continue the examination of factors that influence faculty to retire early, since an imbalance

in the supply and demand of faculty is anticipated and the cohort of faculty who will be eligible to retire will be very large in the next decade. Since it appears that the intent to retire early may not be analogous to the intent to leave one's position for other reasons, it will be helpful to consider factors in the work environment that can be manipulated to encourage older faculty who remain vital to remain on the faculty.

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APPENDIX A: SURVEY TO FACULTY MEMBERS

Dear Faculty Member:

The issue of retirement is one of the most critical issues facing higher education today. Since 1987 when the Virginia Legislature abolished mandatory retirement, the Provost's Office has been studying the effects of this decision on hiring practices, efforts to retain faculty, early retirement benefit packages, and the changing demographics in the institution. The current study will provide data for a doctoral dissertation in the College of Education and will be used in conjunction with on-going studies in the Provost's Office.

The enclosed questionnaire assesses some of the factors that are relevant to the decision that faculty members make regarding the age at which they intend to retire. You have been selected for this study because of your experience and activities within the university. Your answers will be confidential and will never be used in any manner that will identify either you or your department. All data will be aggregated only by college and university.

It is important that you respond to this questionnaire, since a strong response rate is required to reflect an accurate assessment of faculty attitudes. Please be certain to sign the informed consent form at the top of the questionnaire so that I may ask your department head/chair three questions regarding your vitality in research, teaching, and service. The responses of the department head/chair will also remain confidential and results will be aggregated only by college and university.

The questionnaire will take less than ten minutes to answer. After you have completed the questionnaire, place it in the enclosed pre-addressed inter-office envelope and mail it to me as soon as possible. If you do not wish to participate, please return the questionnaire to me.

I appreciate your help and cooperation on this project. Again, you may be assured of the confidentiality of this study. If you have any questions, please contact me at 231-3787.

Sincerely,

Beverly H. Sgro
Ph.D. Candidate
College of Education

SURVEY OF FACULTY MEMBERS

INFORMED CONSENT FORM

I hereby give my consent for the researcher of this study to use my responses in a dissertation study and to publish such material under the following conditions. I understand that my responses will remain confidential and all data will be reported as a part of the aggregated data for the college or university. The researcher will not identify the data in any manner that allows the attribution of my responses to me or to my department.

SIGNED: _____ **DATE:** _____

I also grant permission to the researcher to request that my department head/chair provide information regarding the vitality of my research, teaching, and service activities as they relate to the university. This information will be treated confidentially and no identification of either me or my department will be made in the research. All data will be reported as an aggregate of the college or the university.

SIGNED: _____ **DATE:** _____

Your responses to all of these questions will be aggregated with data from other faculty members at Virginia Tech. Your answers will be kept confidential and there will be no identification of your name or your departmental affiliation. There are no right or wrong answers. We want to know your honest opinion about each of these statements.

I. JOB SATISFACTION

We are especially interested in how satisfied you are with particular aspects of your job. Using the scale provided, please respond for each aspect of your job relative to your current position by circling the response that corresponds to your feelings.

1 = Extremely Dissatisfied
7 = Extremely Satisfied

- | | |
|--|---------------|
| 1. The amount of job security I have | 1 2 3 4 5 6 7 |
| 2. The amount of pay and fringe benefits I receive | 1 2 3 4 5 6 7 |
| 3. The amount of personal growth and development I get in doing my job | 1 2 3 4 5 6 7 |
| 4. The people I talk to and work with on my job | 1 2 3 4 5 6 7 |

5. The degree of respect and fair treatment I receive from my department head or chair 1 2 3 4 5 6 7
6. The feeling of worthwhile accomplishment I get from doing my job 1 2 3 4 5 6 7
7. The chance to get to know other people while on the job 1 2 3 4 5 6 7
8. The amount of support and guidance I receive from my department head/chair 1 2 3 4 5 6 7
9. The degree to which I am fairly paid for what I contribute to this organization 1 2 3 4 5 6 7
10. The amount of independent thought and action I can exercise in my job 1 2 3 4 5 6 7
11. How secure things look for me in the future in this organization 1 2 3 4 5 6 7
12. The chance to help other people while at work 1 2 3 4 5 6 7
13. The amount of challenge in my job 1 2 3 4 5 6 7
14. The overall quality of the supervision I receive in my work 1 2 3 4 5 6 7

II. ATTITUDE TOWARD UNIVERSITY

We want to know how you feel about Virginia Tech as an organization for which to work. Using the scale provided please express your degree of agreement or disagreement by circling the response that corresponds to your feelings.

1 = Strongly Disagree
7 = Strongly Agree

15. I am willing to put in a great deal of effort beyond that normally expected in order to help this university be successful. 1 2 3 4 5 6 7
16. I talk up Virginia Tech to my friends as a great university to work for. 1 2 3 4 5 6 7
17. I feel very little loyalty to Virginia Tech. 1 2 3 4 5 6 7

18. I would accept almost any type of job assignment in order to keep working for Virginia Tech. 1 2 3 4 5 6 7
19. I find that my values and the university's values are very similar. 1 2 3 4 5 6 7
20. I am proud to tell others that I am part of this university. 1 2 3 4 5 6 7
21. I could just as well be working for a different university as long as the type of work were similar. 1 2 3 4 5 6 7
22. This university really inspires the very best in me in the way of job performance. 1 2 3 4 5 6 7
23. It would take very little change in my present circumstances to cause me to leave the university. 1 2 3 4 5 6 7
24. I am extremely glad that I chose this university to work for over others I was considering at the time I came here. 1 2 3 4 5 6 7
25. There's not too much to be gained by sticking with this university indefinitely. 1 2 3 4 5 6 7
26. Often, I find it difficult to agree with this university's policies on important matters relating to its faculty. 1 2 3 4 5 6 7
27. I really care about the fate of this university. 1 2 3 4 5 6 7
28. For me this is the best of all possible universities for which to work. 1 2 3 4 5 6 7
29. Deciding to work for this university was a definite mistake on my part. 1 2 3 4 5 6 7

III CURRENT ACTIVITIES

On the scale provided, please indicate your response for each of these three questions by circling the response that most closely describes your opinion of your activities.

1 = Exceptionally Low
7 = Exceptionally High

- 30. Rank your current research activity as compared with all of the other members of your department. 1 2 3 4 5 6 7
- 31. Rank your current teaching vigor as compared with all of the other faculty in your department. 1 2 3 4 5 6 7
- 32. Rank your current service activity as compared with all of the other faculty in your department. 1 2 3 4 5 6 7

IV RETIREMENT AGE

We are interested in the age at which you intend to retire. The following paragraph is a synopsis of the retirement options available at Virginia Tech. Please read the paragraph and then answer question 33.

In order to retire at Virginia Tech a faculty member must have at least five years of service and have attained age 55 to retire early with reduced benefits. In order to receive full benefits the member must have 30 years of service and have attained age 60, or have attained age 65 with any number of years of service. In addition, a faculty member who has no VSRS service credits prior to April 1, 1980, may retire with full benefits if the member is at least 55 years of age, has at least 30 years of service credit, and the sum of the age and service credit equals 90. In order to receive full social security benefits, an employee must be 65 years old.

33. At what age do you plan to retire? _____

Please place this questionnaire in the enclosed pre-addressed envelope and put it in the inter-office mail.

YOUR HELP IS SINCERELY APPRECIATED.

APPENDIX B: SURVEY TO DEPARTMENT HEADS

Dear Department Head:

The Provost's Office is continuing its efforts to assess the long-term effects of the vitality of the faculty members of the University. We are currently interested in those members of the university faculty who have considerable years of experience in teaching, research, and service. Some of those faculty members have recently completed a survey instrument that addressed their perceptions of their own vitality and their interpretation of their department head/chair's conception of their vitality. Other questions that were related to their satisfaction with their job and their commitment to Virginia Tech were on the survey instrument.

I am requesting that you complete the enclosed questionnaire(s) on the following faculty members in your department. Each of these faculty members has been informed of the purpose of this study and has signed a form that releases you to provide this information to the researcher of this study. The information you provide, as well as that provided by your faculty member(s), is confidential and will never be used to identify your department, since it will be aggregated by college and university. There are only three questions regarding each faculty member, so it will take only a short time to complete the questionnaire. This research will serve as data for a doctoral dissertation in the College of Education and will be used in conjunction with on-going studies in my office.

I appreciate your cooperation in completing the enclosed form(s) immediately. The forms are due back in my office by Sept. 30, 1989. Please place them in the enclosed pre-addressed inter-office envelop and mail them immediately.

Thank you for your prompt attention to this project.

Sincerely,

John M. Perry
Associate Provost

SURVEY OF DEPARTMENT HEADS/CHAIRS

As a part of the long-range planning efforts of the Provost's Office we are considering the staffing patterns of all departments for the next twenty years. We are especially interested in those members of your department who have significant years of service. For each of these faculty members who have consented to the collection of this information, I have enclosed a brief questionnaire which I request that you complete and return to my office in the enclosed envelope. All responses are confidential and will never be used in a manner which identifies you or the members of your department. All data will be aggregated by the entire college and university.

Using the scale provided, please indicate your response for each of the three questions by circling the response that most closely describes your opinion of this faculty member.

1 = Exceptionally Low
2 = Exceptionally High

1. Rank the current research activity of this faculty member as compared with all of the other members of your department. 1 2 3 4 5 6 7
2. Rank the current teaching vigor of this faculty member as compared with all of the other members of your department. 1 2 3 4 5 6 7
3. Rank the current service activity of this faculty member as compared with all of the other members of your department. 1 2 3 4 5 6 7

BEVERLY HUSTON SGRO

312 Pearman Road
Blacksburg, VA 24060

(703) 231-3787 (Office)
(703) 552-8724 (Home)

EDUCATION

Doctor of Philosophy:
Educational Research and Evaluation
Virginia Polytechnic Institute and State University, 1990

Master of Science:
Management, Housing and Family Development
Virginia Polytechnic Institute and State University, 1974

Bachelor of Science:
Speech Pathology and Audiology
Texas Woman's University, 1963

OTHER:

Richard F. Stevens Institute for Chief Student Affairs
Officers and Deans, National Association of Student
Personnel Administrators, San Francisco, California,
1990; Interfraternity Institute, Bloomington, Indiana,
1982.

PROFESSIONAL EXPERIENCE

DEAN OF STUDENTS

Virginia Polytechnic Institute and State University,
7/89 - Present

Leadership responsibility for an administrative unit including Alcohol/Substance Abuse Education; Black Cultural Affairs; Campus Security Issues; Community Service; Judicial Affairs; Leadership Training; Multicultural Affairs; Orientation; Special Student, Faculty, and Staff Services; Student Affairs Research, Student Recognition and Awards; and Women's Issues. Develop plans, policies, and budgets for these areas, serve as chair for major task forces and committees, emergency contact for students and parents in cases of death and serious injuries, advocate for student issues with other agencies within the university and the Board of Visitors, appeals officer for judicial system, and liaison with faculty and administrators of the university. Serve on the Commission on Undergraduate Studies, Core Curriculum Committee, Vice-President's Management Council, and other university committees as

assigned.

EXECUTIVE ASSISTANT TO VICE PRESIDENT FOR STUDENT AFFAIRS
Virginia Polytechnic Institute and State University,
7/88 - 7/89

Supervised divisional research and program development. Coordinated divisional personnel policies and practices. Served as the division Affirmative Action officer. Administered the public affairs of the division, including the coordination of division newsletter and a research publication, and served as liaison to all media. Chaired the committee on Committees, and the Professional and Staff Development Committee. Solicited external funding for the division. Served as judicial hearing officer for off-campus students. Developed and administered the budget for the office of the Vice President for Student Affairs. Served on major university committees, such as the Parking Committee and Founders Day Program, and conducted the student award programs, such as "Who's Who in American Universities and Colleges", and "Man and Woman of the Year."

RESEARCH ASSOCIATE - OFFICE OF VICE PRESIDENT FOR STUDENT AFFAIRS
Virginia Polytechnic Institute and State University,
7/87 - 7/88

Conducted major research projects for the Vice President for Student Affairs. Wrote position papers and speeches. Analyzed policies. Half-time position while completing Ph.D.

ASSISTANT DIRECTOR OF STUDENT ACTIVITIES
Virginia Polytechnic Institute and State University, 7/84
- 7/87

Leadership responsibility for an administrative unit including Greek Affairs, Religious Affairs, Virginia Tech Union, Office of Student Organizations, and the War Memorial Chapel. Supervised administrative faculty, graduate interns, and clerical staff. Developed plans and policies for the expansion of an on-campus Greek housing system; adjudicated fraternal judicial cases. Served on major University committees including: Fall and Summer Orientation, commencement, Squires Student Center Expansion, and Homecoming. Conducted the Student Organization Showcase. Served as the University liaison for religious affairs. Conducted national search for professional staff and evaluated personnel.

COORDINATOR FOR GREEK AFFAIRS
Virginia Polytechnic Institute and State University,
11/81 - 6/84

Advised the Interfraternity and Panhellenic Councils; supervised 32 fraternities and 10 sororities, planned and implemented leadership development of an on-campus Greek housing project; co-authored The Manual on Greek Housing, coordinated major programming events, served on staff search committees and selection committees for student awards; resolved Greek judicial matters; monitored the scholastic averages of all Greek students; supervised graduate interns; served as University liaison to town officials, national fraternity officers, Alcohol Beverage Control Agent, and other University officials; served as a presenter for Summer Orientation; conducted and wrote the evaluation of Summer Orientation.

TENNIS PROFESSIONAL
Blacksburg Country Club, Blacksburg, Virginia,
5/77 - 10/81
Nationally Certified Tennis Instructor

GRADUATE TEACHING ASSISTANTSHIP
Virginia Polytechnic Institute and State University,
1/72 - 3/72

RESEARCH ASSISTANT
Texas Christian University, 9/64 - 8/65

SPEECH PATHOLOGIST
Arlington Public School System, 1/64 - 6/64

TEACHER OF THE DEAF
Midland Independent School System, 9/63 - 1/64

RESEARCH ASSISTANT
Texas Christian University, 6/53 - 9/63

HONORS AND HONORARIES

Dean's List, 1959-1963
Mortarboard National Senior/Leadership Honor Society,
1963
Omicron Delta Kappa, National Leadership Honor Society,
1987
Phi Kappa Phi, National Scholarship Honor Society, 1974
Phi Upsilon Omicron, National Scholarship Honor Society
for Home Economics, 1974
Pi Lambda Theta, National Education Honor Society, 1962
Sigma Alpha Eta, National Speech and Hearing Honor

Society, 1962
Who's Who Among Students in American Universities and
Colleges, 1963
Zeta Phi Eta, National Honor Scholarship for Speech, 1961

PROFESSIONAL AFFILIATIONS

American Association for Counseling and Development
American College Personnel Association
American Educational Research Association
Association of Fraternity Advisors
National Association of Student Personnel Administrators
Virginia Association of Student Personnel Administrators
Association of Student Judicial Affairs

PUBLICATIONS

Sgro, B.H. (1985). The Evolution of Fraternities for
Women. VASPA Interchange 14 (1), 3-7.

PROFESSIONAL ACTIVITIES

Key Note Speaker, Southeastern Department Heads of
Psychology, "The Dean's Perspective on Our Students",
Atlanta, 1990.

Key Note Speaker, National Achievement Scholars Banquet,
"Choosintg a College: There are Only Two Questions"
Virginia Polytechnic Institute and State University,
1990.

Presenter, "Recognition of Student Organizations: A
Question of Constitutional Rights, II" National
Association of Student Personnel Administrators, New
Orleans 1990.

Key Note Speaker, "Diversity on Campus", Association for
Student Development Workshop, Virginia Polytechnic
Institute and State University, 1990.

Member, American College Personnel Association Commission
I (Organization, Administration, and Development of
Student Personnel Services)
- Directorate Body Member, 1986 - 1988
- Secretary, 1986 - 1988

Presenter: "Recognition of Student Organizations: A
Question of Constitutional Rights," American College
Personnel Administrators, Miami, 1986.

Key Note Speaker, "Getting the Most From the Fraternal

Experience", Delta Gamma Province Leadership Seminar, Virginia Polytechnic Institute and State University, 1987.

Presenter, "Projecting Success - A Professional and Personnel Model," National Association of Student Personnel Administrators, Washington D.C., 1986.

Member, Interest Session Committee, National Association of Student Personnel Administrators, Washington D.C., 1986.

Presenter, "Strengthening Greek Councils," Virginia Association of Student Personnel Administrators Leadership Conference, Hampden-Sydney College, 1985.

Guest Speaker, "The Who, What, Why, and How of Student Activities." Lynchburg Alumni Association, 1985.

Member, Greek Task Force, Commission IV, American College Personnel Association, 1985.

Guest Speaker, "Hazing: The Legal and Personal Responsibilities," Roanoke College, March, 1985.

Co-Chair, Virginia Association of Student Personnel Administrators Conference for Greek Advisors, 1985.

Presenter, "Fraternity Minimum Standards," Virginia Association of Student Personnel Administrators, Hampden-Sydney College, 1985.

Presenter, "The Changing Drinking Age in Virginia: How to Cope," Hollins College, 1985.

State Coordinator for the Association of Fraternity Advisors, 1982-1984.

Presenter, "Hazing in Student Organizations: Definition and Administrative Response," American College Personnel Association, Baltimore, 1984.

Presenter, "University Hazing Policy: A Need for Dialogue Between NIC, NPC and NPHC," Association of Fraternity Advisors, Kansas City, 1983.

COMMUNITY SERVICE

BOARD OF TRUSTEES
Foxcroft School, Middleburg, Virginia, 1989 - Present

Bonely H. Ayres