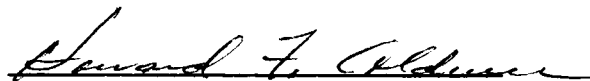


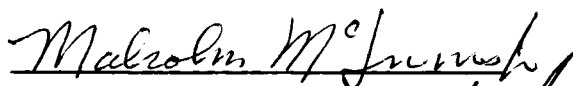
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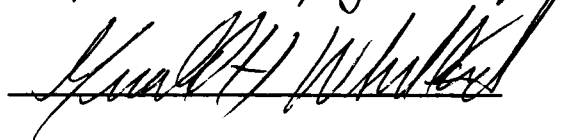
I am submitting herewith a dissertation written by James Kennon Bowles entitled "An Investigation of Organizational Commitment, Facet Satisfaction, and Intent to Remain Among Faculty at Selected Tennessee Institutions of Higher Education." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Administration and Supervision.


John T. Lovell, Major Professor

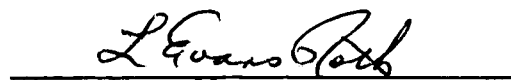
We have read this dissertation
and recommend its acceptance:







Accepted for the Council:


Vice Chancellor
Graduate Studies and Research

AN INVESTIGATION OF ORGANIZATIONAL COMMITMENT, FACET SATISFACTION,
AND INTENT TO REMAIN AMONG FACULTY AT SELECTED
TENNESSEE INSTITUTIONS OF HIGHER EDUCATION

A Dissertation
Presented for the
Doctor of Education
Degree
The University of Tennessee, Knoxville

James Kennon Bowles

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ABSTRACT

The purpose of this study was to gather empirical data relating to "job attitudes" of faculty in selected institutions of higher education in Tennessee. The problem that was addressed was the need for data that would give administrators insight into the nature of faculty job attitudes; data that would give administrators more reliable insights in order to help them in dealing more effectively with such issues as faculty turnover, faculty development, collective bargaining, and general faculty satisfaction or dissatisfaction with their jobs. Three current general areas were identified through a review of the literature which have not been investigated to a great extent in higher education. These areas included: "Intent to Remain," a strong predictor of turnover (Mobley, 1977); "Organizational Commitment," a reliable measure of attachment to an organization, and "Job Satisfaction," a universal construct measuring current feelings about a job. In measuring job satisfaction an additional purpose of the study was to examine Herzberg's dual-factor theory and further test its applicability in an educational setting.

The questionnaire designed to gather data to address this problem was comprised of three separate sections. Section one of the questionnaire requested specific information relating to the demographic characteristics of the population sampled. Demographic information requested included: age, gender, level of education,

type of institution, faculty rank, tenure status, marital status, and length of service. This section also contained a question designed to measure "Intent to Remain" (Mobley, 1977), and "Expressed Job Satisfaction." Section two of the questionnaire consisted of the Organizational Commitment Questionnaire, developed by Monday, Porter, and Steers (1979), while section three consisted of the Job Factor Questionnaire developed by Lahari and Srivasta (1967) and Darrow (1971).

The questionnaire was mailed to a stratified sample consisting of faculty in public universities, private colleges and universities, and public community colleges. A total of 213 questionnaires were returned out of a sample set of 300 which translated to a response rate of 71%.

A set of twenty research questions was designed around the three central job attitude measures. Statistical treatment of the data centered on the treatment of each of those measures as dependent variables. Statistical analysis involved the use of the Statistical Package for the Social Sciences (Nie, Hall, et al., 1970), and primarily analyzed the research questions via One-way Analysis of Variance, paired and independent t-tests, and Pearson Product Moment Correlations.

The results of this study indicated a high degree of intent to remain, organizational commitment, and expressed job satisfaction across all three sub-populations surveyed.

In spite of the high overall level of intent to remain, organizational commitment, and overall satisfaction for these faculty members, the results clearly indicated significantly lower levels of organizational commitment and expressed satisfaction for faculty at public universities as compared to the other two sub-populations examined in the study. Organizational commitment scores were also significantly lower for male faculty members as opposed to their female counterparts. Specific factors which were linked to "low" intent to remain scores included the intrinsic factors: lack of recognition, lack of opportunity for advancement, and lack of opportunity for growth on the job.

The data collected from the Job Factor Questionnaire did not support Herzberg's "dual-factor" theory. Although motivators as a group related more to positive feelings about the job for faculty than did hygiene factors, motivators also related more to negative feelings about the job. This indicated the probable existence of a dual-continuum as an explanation for the relationship of various intrinsic and extrinsic factors to faculty attitudes (satisfaction/dissatisfaction) about the job.

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CHAPTER I

INTRODUCTION

Colleges and universities were confronted by a myriad of challenges as they became more firmly implanted in the decade of the 80's (Mayhew, 1979). The most immediate and compelling challenge, maintaining quality education in a time of economic uncertainty, had cornered the attentions of all who were seeking to sustain these institutions. Styles of management formerly foreign to academia were being examined with a renewed sense of urgency. As administrators developed increasingly sophisticated management skills, they remained faced with the basic problem of organizational differences (Millett, 1976) which stubbornly cast unique shadows on the development of the "art of management" in higher education.

Chief antagonist in this scenario was the relentless onslaught of economic hardship--a problem that was deeply seated in the organizational fiber of these modern day institutions of higher education; and a problem propagated by their funding systems. In turn, a suspected "spin-off" of these economic problems was issues relating to the job attitudes of employees who worked in these institutions.

Since other organizational difficulties invariably go hand in hand with problems associated with employee job attitudes, there has been a limited but keen interest in job attitudes of faculty members in institutions of higher education. Several authors have examined

job attitudes of faculty members in terms of job satisfaction and dissatisfaction (Neuman, 1978; Lawler & Walker, 1980; Cares & Blackburn, 1978; Hubert and Giles, 1977). Other authors have looked more specifically at these job attitudes and their relations to collective bargaining in higher education (Nicholsen, 1977; Feiulle and Blandin, 1974; Lawler & Walker, 1980). Other aspects of job attitudes that have received a great deal of attention in management and industrial psychology literature were less apparent in research that was being done in higher education, especially with members of the faculty. This appeared to be an interesting paradox in that much of the innovative and progressive research that was being presented came from faculty members in our institutions of higher education. Yet when it came to studies examining that particular body of professional scholars, there appeared to be far less of an offering from which to choose.

Faculty members seemed to be a unique group and posed certain complications in terms of applying principles of organizational psychology or managements to them (Millet, 1976; Besse, 1973). An example of this has been the issue of turnover. In almost all organizations turnover is the undesirable effect of many factors typically related to the job attitudes of employees. In institutions of higher education the issue of the undesirability of faculty turnover is one that has raised a certain amount of debate. According to O'Toole (1978), the turnover rate for tenured faculty was at 3% in the 1960's, around 1.4% in 1972, and was estimated at

far less than 1% at the time of this study. Thus, the turnover rate became a problem of "stagnation" as opposed to the "typical" problems associated with a high rate of turnover.

The empirical examination of faculty turnover is an area that has not received a great deal of attention in the literature. In two comprehensive surveys of studies relating to turnover (Porter and Steers, 1973; Mobley, Griffeth, Hand, and Meglino, 1979) only two studies actually looked at university employees (Graen and Ginsburgh, 1977; Graen, Orris, and Johnson, 1973). Both of these studies focused primarily on clerical and supporting staff and were fairly limited in the scope of factors examined.

Turnover research in general has been on the upswing in recent years and has undergone some rather significant transformations since the early writings of Brayfield and Crockett (1955), Herzberg, Mausner, Peterson, and Capwell (1957), and Vroom (1964). In general, these writers were responsible for putting forth the notion that there was at least some relationship between job dissatisfaction and turnover.

The more complex and recent models of Mobley, Griffeth, Hand, and Meglino (1979) emphasize the importance of the behavioral intention of wanting to remain or wanting to leave an organization. In this particular model other precursors of turnover such as intention to search, thinking of quitting, and probability of finding an acceptable alternative, individually acted as more significant determinants than actual job satisfaction in predicting

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turnover. Supporting theoretical work by Fishbein and Ajzen (1975) further postulated that an individual's beliefs about a "stimulus object" will be the determining factor in that person's feelings, attitudes, and ultimate overt behavior towards that object.

A great deal of attention has also been focused on the variable of organizational commitment as it relates to various aspects of employee behavior, particularly withdrawal (Monday, Steers, and Porter, 1979). Commitment has been viewed alternately as an attitude and as an actual active relationship with an organization. Monday, et al. (1979, p. 226) saw organizational commitment as being distinctly different from the concept of job satisfaction:

To begin with, commitment as a construct is more global, reflecting a general effective response to the organization as a whole. Job satisfaction, on the other hand, reflects one's response either to one's job or to certain aspects of one's job. Hence, commitment emphasizes attachment to the employing organization, including its goals and values, while satisfaction emphasizes the specific task environment where an employee performs his or her duties.

Several studies have shown a definite significant relationship between organizational commitment and turnover (Porter, Crampon & Smith, 1976; Porter et al., 1973; Steers, 1977) with various types of employee groups. As of this writing, the organizational commitment variable has yet to be utilized in examining faculty members in higher education.

As mentioned earlier, data regarding the "job satisfaction" of faculty members have probably been the most apparent in regards

to studies of faculty job attitudes as faculty members have been the object of several studies dealing with job satisfaction.

Statement of the Problem

The problem that was addressed through this study was the lack of information relating to faculty members associated with institutions of higher education in the state of Tennessee with regard to specific characteristics surrounding the attitudes that these faculty members had about their jobs. Those who have been called on to make evaluations of the overall morale or attitude of their faculty have frequently had to do so without the benefit of meaningful factual data.

Two very salient issues supported in recent literature address the importance of understanding more about faculty job attitudes. The areas of collective bargaining and of faculty development strategies have had a great deal to gain from information relating to faculty job attitudes.

One view that has offered further insight into the need for closer scrutiny of issues pertaining to the job attitudes of faculty in the university environment was that there were unique factors associated with a university that attracted or repelled certain individuals based on their own unique set of needs. According to Maimon and Ronen (1978, p. 1028):

The inconclusive results in the published literature may result from environmental conditions in the research samples. It is quite likely that different employee populations, at different job levels and in different

organizations, perceive the level and range of available rewards differently.

The undisputed uniqueness of the organization studied and the dearth of material focused on it, increased the necessity of studying it more fully.

Purpose

The purpose of this study was to examine the relationship of intrinsic and extrinsic facets of satisfaction, expressed satisfaction, and organizational commitment with a variable designed to predict turnover (expressed intent to leave an organization).

Various demographic variables were also examined as added independent variables to examine their relationship to turnover intention. Demographic variables included: age, sex, level of education, type of institution, faculty rank, marital status, tenured vs. nontenured, expressed satisfaction, and length of service.

An additional purpose was to investigate the dual-continuum theory of satisfaction. Through this examination, the validity of Herzberg's "Dual-Factor" Theory was examined as it related to faculty at selected institutions of higher education in Tennessee.

The general purpose of the study was again, to understand better factors that would better predict employee turnover.

According to Kraut (1975, p. 241):

Direct measures of employee intentions in periodic attitudes surveys could have a great deal of potential use for manpower planning. Use of direct measures

might permit forecasting of personnel losses with much greater accuracy. They might also indicate problem areas and allow perceptive action to be taken to forestall turnover in key groups.

Assumptions

A key assumption in this study is that the work setting in a college and university setting is inherently different from other work settings and therefore deserves special consideration.

Definitions

Community College--A state supported institution of higher education that is primarily a two-year institution granting no higher than associate or technical degrees.

Facet Satisfaction--An individual component of overall satisfaction derived from attitudes or conditions relating to the worker in his/her relation to the work environment.

Faculty--Any full-time academic staff member whose primary duties include instruction, research, or service and who has the rank of professor, associate professor, assistant professor, or instructor and would also include academic department heads.

Hygiene Factors--Factors that are related to the job setting. In this particular study those factors are supervision, personal life, status, job security, working conditions, relationships with superiors, relationship with subordinates, university policy and administration, and salary.

Intent to Remain--The indication by employees that he/she intends to remain employed in his/her college or university position.

Job Dissatisfaction--The overall negative feeling that a worker may have about his/her job which results from attitudinal and experienced interaction with a variety of components or factors inherent in the job setting and work environment.

Job Satisfaction--The overall positive feeling that a worker may have about his/her job that results from attitudinal and experienced interaction with a variety of components or factors inherent in the job setting and work environment.

Motivators--Also known as satisfiers, there are factors which Herzberg contends lead to a positive attitude towards a job. These factors include achievement, recognition, the work itself, advancement, responsibility, and growth (Herzberg, Mausner, and Synderman, 1959).

Organizational Commitment--The strength of an employee's identification with a particular organization including his/her degree of involvement with that organization.

Private College or University--An institution of higher education primarily funded by private endowment and governed by persons appointed by that private entity to which the institution is attached and is a baccalaureate and/or graduate degree granting institution.

Public University--An institution of higher education primarily funded through the state and governed by a state appointed Board of Trustees offering both baccalaureate and graduate degrees.

Research Questions

A set of 20 research questions were utilized to address the problem set forth in this study. The "primary" research questions dealt with the relation of "intent to remain" with other variables utilized in the study. Intent to remain was treated as the "dependent variable" in research questions 1-5. For research questions 6-9 the variable organizational commitment as measured by the Organizational Commitment Questionnaire was rotated into the position of the dependent variable. Expressed satisfaction was also a variable that was treated as "dependent" and was examined in research questions 10-11. Other research questions (12-19) looked at the mean difference in the Job Factor Questionnaire factors in their contribution to positive or negative feelings about the job, in relation to each of the demographic variables utilized in this study. The final research question examined the plausibility of the Herzberg assertion that satisfaction/dissatisfaction operates on a "dual continuum" as opposed to a "bipolar" continuum and whether there was a difference in motivator and hygiene factors in their contribution to satisfaction and dissatisfaction.

Research Question 1--Does a faculty member's degree of "intent to remain" with an organization vary depending on whether

that faculty member teaches at a public university, public community college, or at a private college or university?

Research Question 2--Does a faculty member's "intent to remain" vary depending on his/her level of organizational commitment as measured by the Organizational Commitment Questionnaire?

Research Question 3--Does a faculty member's expressed level of "intent to remain" vary depending on his/her expressed level of job satisfaction?

Research Question 4--Does a faculty member's expressed level of "intent to remain" vary when examined with the demographic variables: age, gender, highest level of education, faculty rank, tenure, marital status, and length of service?

Research Question 5--Are there differences in the "mean difference" between the 16 items on the JFQ in their contribution to positive or negative feelings about the job when examined by expressed level of "intent to remain?"

Research Question 6--Does a faculty member's level of organizational commitment vary depending on whether that faculty member teaches at a public university, a public community college, or at a private college or university?

Research Question 7--Does a faculty member's level of "organizational commitment" vary depending on his or her expressed level of job satisfaction?

Research Question 8--When the "organizational commitment" variable is treated as the dependent variable, and is grouped by

the demographic variables (age, gender, highest level of education, faculty rank, tenure, marital status, and length of service), is there a significant difference in the level of organizational commitment expressed within each of these variables?

Research Question 9--When "organizational commitment" is examined in terms of the 16 factors of the JFQ as they relate to positive or negative feelings about the job, is there a significant difference of the "mean difference" value of these 16 factors and scores on the Organizational Commitment Questionnaire?

Research Question 10--Does a faculty member's expressed level of job satisfaction vary depending on whether that faculty member teaches at a public university, a public community college, or at a private college or university?

Research Question 11--Does a faculty member's expressed level of job satisfaction vary when the faculty members are grouped by the demographic variables: age, gender, highest level of education, faculty rank, tenure, marital status, and length of service?

Research Question 12--When respondents are grouped by age, are there differences in the "mean differences" between the 16 items on the JFQ in their contribution to positive or negative feelings about the job?

Research Question 14--When respondents are grouped by type of institution, are there differences in the "mean differences" between the 16 items on the JFQ in their contributions to positive or negative feelings about the job?

Research Question 15--When respondents are grouped by whether they are tenured or non-tenured, are there differences in the "mean difference" between the 16 items on the JFQ in their contribution to positive or negative feelings about the job?

Research Question 16--When respondents are grouped by faculty rank, are there differences in the "mean difference" between the 16 items on the JFQ in their contributions to positive or negative feelings about the job?

Research Question 17--When respondents are grouped by level of education, are there differences in the "mean difference" between the 16 items on the JFQ in their contributions to positive or negative feelings about the job?

Research Question 18--When respondents are grouped by "length of service," are there differences in the "mean difference" between the 16 items on the JFQ in their contributions to positive or negative feelings about the job?

Research Question 19--When respondents are grouped by whether they are married or not married, are there differences in the "mean difference" between the 16 items on the JFQ in their contributions to positive or negative feelings about the job?

Research Question 20--Are the job factors, as measured by the JFQ, that lead to positive feelings about the job different from those leading to negative feelings about the job?

Treatment of the Data

Once all responses were collected, all completed questionnaires were coded and transferred to IBM cards to facilitate statistical treatment. Questionnaires were not utilized if more than 2 Job Factor Questionnaire factors were omitted by the respondent, if the "intent" item did not receive a response, or if more than one Organizational Commitment Questionnaire variable was omitted. The Organizational Commitment Questionnaire (OCQ) was computer scored through the arithmetic averaging of the 12 OCQ items. Further data treatment information can be discerned by reviewing the SPSS Program that was written to process the data gathered through this study (Appendix A).

There has been considerable debate over whether or not it is appropriate to use parametric statistical procedures with ordinal level data (Labovitz, 1970) by treating the data as interval level data. Nie, Hall et al. (1970, p. 6) described a measurement level frequently used by social sciences that falls between ordinal level data and interval level data referred to as ordered metric:

Falling between the ordinal and interval levels, an ordered metric consists of ordered categories where the relative ordering of the intercategory distances is known even though their absolute magnitude cannot be measured.

According to Labovitz (1970, p. 126), "Although some small error may accompany the treatment of ordinal variables as interval, this is offset by the use of more powerful, more sensitive, better

developed, and more clearly interpretable statistics with known sampling error."

Due to the fact that all of the scales used in this research instrument would be classified as ordinal but fall into the category described above as ordered metric; and due to the fact that the distribution of data meets the stringent assumptions required for the use of parametric statistics, the higher level of statistical measurement for the data will be used in this study.

In order to respond to the research questions put forth in this study, the following basic statistical tests were processed utilizing a program written for the Statistical Package for the Social Science or SPSS. For those research questions that involved the comparison of two unrelated means, where the response set was limited to two variables (gender, marital status, tenure), independent samples t-test were utilized. According to Huck, Cormier, and Bounds (1974) this type of test is appropriate where there is "no logical relationship" between the scores of the two means being examined.

Several research questions involved the comparison of two means that did have a logical relationship, particularly the tests required to respond to Research Question #20, which investigated the relationship between Herzberg's motivators and hygiene factors as they related to positive and negative feelings about the job. The type of statistic employed for these tests is described as Correlated Samples t-tests or paired t-tests.

The vast majority of research questions involved the examination of more than two group means. Since the design of the research questions would again dictate the need to compare group means, the statistical test "one-way analysis of variance" or ANOVA, was used. The versatility of ANOVA allows for a number of group means to be compared in much the same way that t-tests compare means. The assumption of homogeneity of variance were statistically analyzed through two accepted statistical tests, Bartlett Box-F and Cochran's C, and a-posteriori examinations were made via the Scheffe and LSD tests.

To examine the interaction of the 32 responses provided by the Job Factor Questionnaire, the responses linked to positive feelings about the job had to be combined with the responses linked to negative feelings about the job in order to yield one score for each factor which would be a good indicator of the direction and magnitude of the responses for that one factor. A command was submitted to the SPSS Program which called for the subtraction of the response for a specific factor linked to negative feelings about the job, from the same factor's score where it was linked to positive feelings about the job. This score was defined as the "F score" with F1-F16 representing a cumulative score for each of the 16 factors on the JFQ. Justification for this computation was provided in both the Darrow (1971) and the Lahari and Srivista (1964) studies utilizing the Job Factor Questionnaire. A positive "F score" indicated that a particular factor was, on the average,

consistently seen as contributing more to positive feelings about the job. A negative F-score indicated a stronger relationship to negative feelings about the job.

One other artificially created variable utilized to respond statistically to questions raised in this study involved the creation of mean scores for each group of factors identified as motivators and hygiene factors. This mean was calculated through the SPSS command requiring an arithmetic averaging of the factors linked to four separate groups under study. Those groups included: (1) motivators linked to positive feelings about the job (posmot); (2) hygiene factors linked to positive feelings about the job (poshyg); (3) motivators linked to negative feelings about the job (negmot); (4) hygiene factors linked to negative feelings about the job (neghyg). Appendix A gives a detailed listing of all commands used in the SPSS Program utilized for this study.

In order to give the reader further insight into the profile of the sample utilized in this study, descriptive statistics and frequency distributions were provided for several of the variables under investigation. Pearson Product Moment Correlations were also computed for several of the variables as a means of further defining the nature of the relationship of the two variables.

Procedures

Sample--This study focused on the population of faculty members at selected institutions of higher education in the state

of Tennessee. Three specific types of institutions were selected for this study as subpopulations. This group included: (1) two public comprehensive state universities; (2) three state community colleges; and (3) four private institutions. The questionnaire and description of the proposed studies were examined and approved by The University of Tennessee Human Subjects Committee (Appendix B).

A randomly selected, stratified sample was drawn from each subpopulation (see Table 1). A random number table was computer generated and applied to a total population list of each of the aforementioned subpopulations. The list of subjects to which the random number table was applied included comprehensive lists of all full-time faculty at that particular institution. In order to insure a statistically reliable sample, a computation was made on the appropriate sample size based on information presented in a table developed by Chester A. Hauskin (1963).

Collection of the Data

The questionnaire and cover letter were sent to a total of 300 faculty members. The cover letter (Appendix C) contained a brief description of the project as well as a guarantee of the confidentiality of individual responses. Respondents were given numerical codes as a means of insuring an adequate and efficient follow-up effort. Questionnaires were sent through first class mail and included a self-addressed, stamped envelope as a means of enhancing the response rate. The respondent's office address was

Table 1. Stratified sample distribution and return rate for questionnaire administered to faculty at selected community colleges, public universities and private institutions.

Population	Population Size	Population Percent	Stratified Sample Size	Number Return	Percent Return
Community College	233	17%	52	40	76.0%
Public University	882	64%	193	134	69.4%
Private Institution	258	19%	55	39	70.9%
	1373	100%	300	213	71.0%

used in all cases. Eleven days after the first mailing, a follow-up reminder was sent to all those who had not yet responded (Appendix D), and a third and final effort to secure completed questionnaires was made 28 days after the original mailing. Once again, this mail-out contained an additional questionnaire as well as a stamped return envelope. The useable response rate over the 37 day data collection period was a return of 213 surveys out of the 300 that were mailed, or 71%.

Questionnaire

The instrument utilized in this study was composed of three distinct sections (Appendix E). Section I of the instrument was designed to collect demographic data selected for use in this study. Specific demographic variables utilized included: gender, age, type of institution (public university, private college, public community college), length of service, tenured vs. non-tenured, title, administration vs. non-administration, and marital status.

Intent to leave was measured via a single item stated as follows:

"If you had your choice, would you still be working here next year?" This particular item was drawn from previous studies that have examined behavioral intentions (either intention to remain or intention to leave) and was well documented in studies by Mobley, Horner, and Hollingsworth (1978), Mobley, Griffith, Hand, and Meglino (1979), and Steel (1981).

Section II of the questionnaire consisted of the Organizational Commitment Questionnaire (OCQ), which is an unpublished instrument developed by Monday, Steers, and Porter (1979). Permission to use the OCQ in this study was received from Dr. Lyman Porter (Appendix E). This instrument had 15 separate items designed to measure three components of organizational commitment. Respondents were asked to react to each item via a 7-point "Likert" scale. This instrument has been used fairly often as a research tool and was based on the authors' definition of organizational commitment which was outlined in greater detail in Chapter II of this study. Studies that have examined the reliability of this instrument have found that the OCQ compares very favorably with other job attitude measures. Test-retest reliability measures reported by Monday, Steers, and Porter (1979) include $R=.75$ over a 4 month period in a study examining psychiatric technicians, and $R=.72$ over a 2 month period with management trainees. The same authors showed that this particular instrument has acceptable levels of convergent, discriminant and predictive validity. Mean convergent validity for the OCQ over several studies was .70 (Monday, Steers, Porter, 1979).

The third part of the instrument employed the Job Factor Questionnaire. This is an unpublished instrument used by Darrow (1971) and is designed to measure the importance of various facets of satisfaction in relation to positive or negative job attitudes. The instrument is constructed in a way to examine empirically

Herzberg's Motivator-Hygiene Theory. The JFQ was itself an adaptation of a similar instrument used by Lahiri and Srivasta (1967). Previous studies using the Lahiri, Srivasta instrument provided acceptable levels of reliability by means of Ebel's Interclass Correlation formula. Permission to use the JFQ was secured from Co. Lyle Darrow, USAF (Appendix G).

Organization of the Study

In Chapter II a comprehensive review of the literature is presented, followed by detailed explanation of the research methodology involved in this study.

Chapter III presents a detailed account of the results of the study, and Chapter IV is the summary, the conclusion, and the recommendations.

CHAPTER II

REVIEW OF LITERATURE

There is a strong body of research and theory that relates directly to the questions concerned with the job attitudes of faculty members in institutions of higher education. Specific topics that had a bearing on this study and are covered in the following pages include general studies relating to: turnover; intent to leave; organizational commitment; and job satisfaction. Lastly, there is a review of research in higher education that relates to the job attitudes of faculty members.

General Studies Relating to Turnover

There is little question that the global area of job attitude research is of paramount importance to any organization. According to March and Simon (1953), the very decision to participate in a given job should be a function of a worker's attitude toward that job. Job attitudes include specific and more tangible elements including: job satisfaction, job dissatisfaction, feelings of belonging to a particular organization, commitment to an organization, and other factors relating to an individual's decision to participate in a given organization.

These attitudes have been shown to have a proven and identifiable effect on an employee's interaction with the organization for which he/she works. A study by Mirvis and Lawler (1977)

investigated the plausibility of actually measuring and quantifying the results of poor employee attitude on an organization in terms of actual cost to the organization. In the Mirvis and Lawler study, the performance of 160 bank tellers was examined through the use of cost accounting techniques. The results of this study concluded that a .5 standard deviation increase in job satisfaction could generate a cross organizational savings of \$17,664 in terms of absenteeism, turnover, and overall job performance.

Although attitudes have had a proven effect on performance, the most permanent and perhaps significant effect related to employee attitudes was the relations of those attitudes to turnover. Abraham (1979, p. 1) estimated that the cost of turnover alone to American industry was around 11 billion dollars a year:

turnover in a particular organization has its own unique set of factors. Because of this, there is no standard prescription available to deal with turnover on an across the board basis. Each situation must be dealt with as if it were unique.

Strauss and Sayles (1972) indicated that most companies recognize that turnover and absenteeism are symptomatic of a wide variety of personnel problems that might occur in an organization. Accordingly, employees who do not like their work will tend to use seemingly minor excuses to get out of a day's work. Further, feelings of alienation on the part of an employee may lead to a desire to become fully and permanently separated from the organization. According to Strauss and Sayles (1972, p. 356), "Personnel watches absenteeism and turnover data closely, not only because both are expressive in themselves, but because they may be symptoms of deeper problems."

Several additional effects of turnover have been identified by James Price (1977, pp. 93-107):

1. Successively higher amounts of turnover probably produce successively larger proportions of administrative staff members relative to production staff members.
2. Successively higher amounts of managerial turnover probably produce successively higher amounts of formalization at a decreasing rate.
3. Successively higher amounts of turnover probably produce successively lower amounts of integration.
4. Successively higher amounts of turnover probably produce successively lower amounts of satisfaction.
5. Successively higher amounts of turnover probably produce successively higher amounts of innovation at a decreasing rate.
6. Successively higher amounts of turnover probably produce successively lower amounts of centralization.

Although turnover is not always considered bad for an organization, it can tend to have a cleansing or regenerative effect on an organization due to the introduction of fresh new workers with fresh new ideas. An organization can never be quite sure that it is the "deadbeats" who are leaving. In fact, Farris (1971) found that 35% of a group of professionals who left an organization were ranked in the top half of that particular job grouping in regard to being "useful." Farris also found that in another organization, that figure was actually 23% of the top 10% of employees working in that particular setting. It is important to note that these data were collected among professional employees including scientists and engineers, of which a substantial percentage had Ph.D.'s.

Another study (Martin, Price, and Mueller, 1981) found similar results in a group of 162 nurses. The study revealed that "leavers" had higher performance ratings than "stayers," although the correlation of leavers to high performance was not statistically significant.

Monday (1981) examined the attitudes of those who stayed in an organization and investigated how they felt about those who left. Results of this study indicated that those who did not leave, who had positive job attitudes, and who were generally satisfied with their job were less likely to believe that turnover of their peers was a result of dissatisfaction with the job.

The importance of employee attitudes has been well established. Maimon and Ronen (1978, p. 1027) underscored this sentiment by stressing:

It is as important for managers to understand their employee's reasons for staying as it is for them to understand their reasons for leaving, especially in view of desired increased motivation and commitment from employees.

The consequences of job satisfaction and dissatisfaction on employee job performance have been well researched. Vroom (1964) found that there were negative relations between job satisfaction and turnover, a somewhat less consistent relationship between job satisfaction and absences, and a somewhat negative relationship between job satisfaction and accidents. Psychological results of prolonged dissatisfaction included frustration (Chung, 1976). Chung in Figure 1 detailed the hypothesized chain of events that

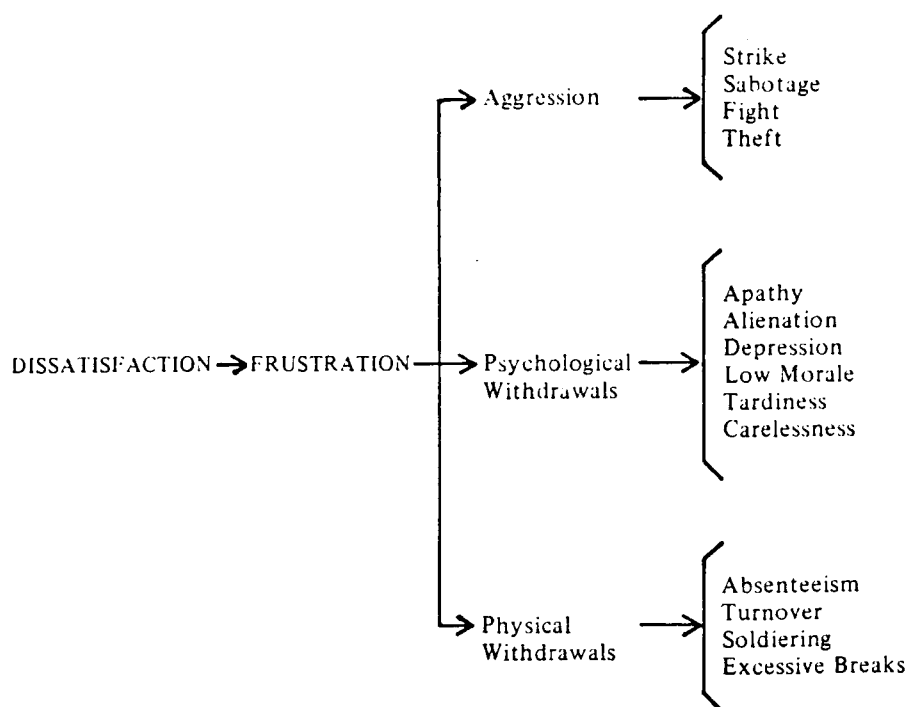


Figure 1. Behavioral problems in organizations resulting from dissatisfaction. Source: Kae H. Chung, "Motivational Theories and Practices," Columbus: Grid, Inc., 1977.

occur as a result of employee frustration. This frustration was a result of not being able to attain a need-satisfying objective. The prolonged effect of frustration could result in aggressive behavior toward management in the form of strike, sabotage, or theft. It could result in psychological withdrawal in the form of apathy, alienation, depression, low morale, tardiness, or carelessness. And lastly, it could result in actual physical withdrawal through such behaviors as absenteeism, excessive breaks, soldiering, or turnover.

Most writers have concluded that the results of job satisfaction are difficult to identify (Vroom 1964). However, there was a dearth of evidence linking various employee behaviors and job dissatisfaction (Porter and Steers, 1973).

One "withdrawing behavior" that has been closely linked with job satisfaction, is job turnover. There has been a multitude of studies that examined the problem of employee turnover, and these studies generally determined that overall satisfaction had a direct negative relationship with employee turnover (Mobley, 1977; Mobley et al., 1979; Vroom, 1964; Porter and Steers, 1973; Herzberg, Mausner, Peterson, and Copwell, 1957). The relationship, although evident, had not been proven to be very strong and in fact correlations were seldomly reported over $r=.40$ (Hom, Katerburg, and Hulin, 1979).

In another related study, Hulin (1966) used the Job Description Index (Smith, Kendall, and Hulin, 1969) to measure

differences in overall satisfaction among employees who left and employees who stayed in an organization. Significant differences in mean satisfaction scores between these groups were evident up to 12 months prior to the point of actual termination. In reviews of research on turnover and its relationship with job satisfaction (Mobley, Griffeth, Hand, and Meglino, 1979; Porter and Steers, 1973), a total of 21 studies of 22 reported a negative relationship of job satisfaction with turnover.

Atchison and Lefferts (1972) investigated the predictive ability of Herzberg's job satisfaction technique as it related to turnover and found that those factors that were described as "hygiene factors" were closely related to turnover. Results of this study also indicated that Herzberg's motivators related more to the decision to produce. Herzberg stated (Herzberg, et al., 1959) that employee withdrawal is the final and ultimate act of a withdrawal process that exists on a single continuum.

Price (1977) distinguished between correlates, determinants, and intervening variables in describing the relationship of various factors to turnover. According to Price (1977, p. 25):

Correlates and determinants are different and should be treated separately. One should not confuse description and explanation. The empirical generalizations which embody the correlates describe, whereas the proportions which embody the determinates explain.

Other factors served as intervening variables and tended to "intervene" between variables that are considered as determinants of actual turnover. The two factors that fell into this classification included satisfaction and opportunity.

Factors that were labeled by Price as determinants included: a negative relationship between higher pay and high turnover; a negative relationship between high integration and turnover; a negative relationship between high instrumental communication and turnover; a negative relationship between successively higher levels of communication and turnover; and a positive relationship between higher centralization and turnover.

Other job related factors that relate to the voluntary separation of employees from their jobs were reported throughout many scholarly journals (Hulin, 1968; Knowles, 1964; Robinson, 1972; Ley, 1966; Dreher and Dougherty, 1980; Spencer and Steers, 1980; Shuh, 1967; Ingham, 1970; Price, 1977; Kraut, 1975; Atchison and Lefferts, 1972; Maimon and Ronen, 1978; Hom, Katerberg, and Hulin, 1979; Saleh and Otis, 1964; Martin, 1979).

Hulin (1968) found that increases in job satisfaction (which coincided with changes in pay and promotion policies) resulted in a statistically significant reduction in turnover. Knowles (1964) also found pay to be related strongly to turnover. Porter and Steers (1968, p. 155) suggested that "Expectancy-Valence" Theory could explain the role of pay in turnover:

. . . it appears that at least two factors could account for the effect of compensation on withdrawal: (A) The perceived equity of rewards compared to expended effort; and (B) the expectation that continued participation will result in more positively valent outcomes than any alternative behavior.

Robinson (1972) found that weighted application blanks related to turnover and that in general, those individuals having the highest

level of turnover were between 20 and 25 years of age. Tenure with place of employment was also found to relate positively to turnover through the use of a weighted application blank. Another study (Ley, 1966) that was supportive of these findings was undertaken with 100 male hourly production workers in which various biographical factors, the work environment and the authoritarianism of the foreman, were examined. The results of this study showed that a significant number of the turnover population was younger and had more jobs the previous two years. Also, having an authoritarian foreman had a high correlation to turnover ($r=.76$). Dreher and Dougherty (1980) used the Department of Labors Occupational Outlook Handbook classification system to rate the job opportunities in the careers of those individuals who had voluntarily left their jobs and on those who remained. The findings of this study indicated that there was a direct relationship between a lower rate of turnover and "stiff competition" in the labor market. The study found that completion for expected job openings, as indexed in the USOL's handbook and other similar publications, was in itself predictive of employee turnover.

In other studies, Spencer and Steers (1980) found that there was no significant relationship between various personal factors and turnover although it did appear that personal factors did have a much stronger relationship with absenteeism. In the use of psychological assessment instruments Schuh (1967) found no conclusive evidence showing that intelligence or aptitude tests are able to predict

turnover. However, he did find that interest inventories, especially the Kuder, seemed to predict turnover better than other types of tests. Saleh and Otis (1964) found some evidence showing that age and job satisfaction seem to rise together until the pre-retirement age which is when satisfaction starts to decline. Organizational size in a study by Ingham (1970) was shown to have a weak relation to turnover. Price (1977) found weak support for the notion that non-managers had higher turnover than managers, that non-governmental employees had higher turnover than their governmental counterparts, that higher professionalism was associated with higher turnover, and in general, that unskilled blue-collar workers had higher turnover than white-collar workers.

In a comprehensive analysis of turnover literature Price (1977) has determined that of the many demographic variables examined in relation to turnover, only the variables--length of service, age, and level of employment--were highly correlated with turnover and at the same time received a substantial amount of support in the literature. Specifically, younger members of an organization and those members with lower length of service appeared to have higher levels of turnover. There were also higher levels of turnover during times of high employment.

Other correlates with slightly less support (Price, 1977, pp. 31-39) included:

1. Level of Skill--Unskilled blue-collar members usually had higher rates of turnover than skilled blue-collar members.

2. Blue-Collar and White-Collar Workers--Blue-collar members usually had higher rates of turnover than white-collar members.
3. Country--The United States usually had higher rates of turnover than other highly industrialized countries.
4. Education--Better educated members usually had higher rates of turnover than less educated members.
5. Non-managers and Managers--Non-managers usually had higher rates of turnover than managers.
6. Non-government and Government--Non-government organizations usually had higher rates of turnover than government organizations.

In addition, Price cited some variables that have been correlated with turnover but have received only very weak support including time of work, place of birth, and existence of pension plans.

Of these numerous aforementioned factors that researchers have linked with various forms of employee withdrawal, there were three specific areas of research that have proven to be the most fruitful of any, and were cited most often in current research as having the most direct relationship to the turnover of employees. These three particular research areas included: 1) a model of behavioral intention introduced by Fishbein and Ajzen (1977) which postulated that an individual's behavior is a function of a behavioral intention to perform that behavior; 2) a model of organizational commitment, a correlate to turnover, based on the work of Lyman Porter; and 3) job satisfaction described as an "intervening variable" in relation to turnover.

Intent to Remain

Mobley, Horner, and Hollingsworth (1978) dismissed any direct relationship between dissatisfaction and turnover and contended that dissatisfaction was related more to the cognitive act of thinking about quitting which they described as an intermediate link in a chain that eventually led to the act of quitting (Figure 2; Mobley, Horner, and Hollingsworth, 1978, p. 410). The model depicted in Figure 2 reveals several linkages that lead to actual intention to quit or stay with the job which is the final stage prior to actual withdrawal. According to Mobley, et al. (1978, p. 409):

The hypothesized decomposition is that job satisfaction will have a successively weaker direct effect on thinking or quitting, intention to search, and intention to quit, but no effect on turnover other than its indirect contribution to intentions.

Although satisfaction has been shown to have a negative relationship with turnover in a vast majority of the studies reviewed, the best single predictor has consistently been a measure of an employee's intention to remain or to quit a given job (Beehr and Gupta, 1978; Kraut, 1975; Mobley, Horner, and Hollingsworth, 1978; Waters, Roach, and Waters, 1976; Mobley, Griffeth, Hand, and Meglino, 1979; Porter and Steers, 1973; Hom, Katerberg, and Hulin, 1979).

Accordingly, Mobley stated (Mobley, et al., 1979, p. 517):

The immediate precursor of behavior is thought to be intentions. . . . Therefore the best predictor of turnover should be intention to quit. . . . The

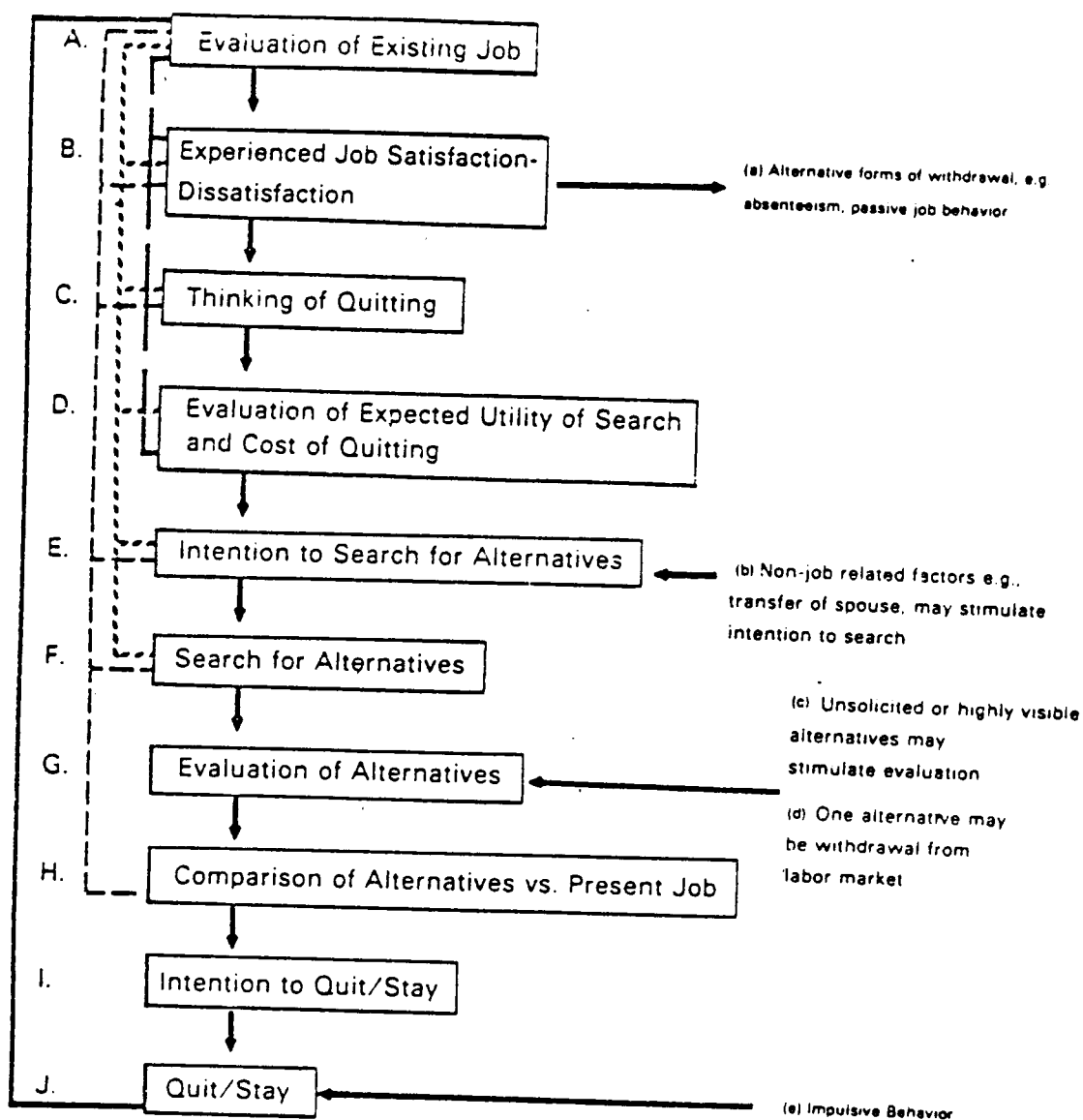


Figure 2. Mobley's original model of the decisional processes underlying employee turnover. Source: William H. Mobley, "Intermediate linkages in the relationship between job satisfaction and employee turnover," Journal of Applied Psychology, 1977, 62, p. 238.

relationship between turnover and intention should be stronger the more specific the intention statement and the closer in time the measurement of the intention and the behavior.

Examinations of the intention model included a study by Roach and Waters (1976) which utilized a step-wise multiple regression formula to examine the relationship of overall job satisfaction, intention about remaining with the company, and frequency of absences. Respondents in this particular study were all female clerical employees in an insurance company. After completing a "job attitude booklet," the subjects were examined again two years later to determine who had remained the entire two years and who had left after only one year. The results showed that turnover had the highest correlation with "intention to remain." Satisfaction (measured on a single item 12-point scale) was significantly related to first-year turnover ($r = -.25$) but was not significantly related to second-year turnover ($r = -.14$). The intention item was significantly related to turnover during both the one- and two-year periods with correlations of $r = -.52$ and $r = -.26$, respectively. The third factor, frequency of absences, was also significantly related to turnover ($r = .38$ for the first year and $r = .28$ for the second year). This particular study gave strong support to the importance of cognitive intentions in relation to actual turnover.

Thomas Martin (1981) criticized most turnover literature due to the fact that the majority of these studies lacked a direction of causality, lacked a set of logical assumptions about the motivational process of intent decisions, lacked a framework for

detecting and ranking significant variables, and lacked application to the industrial world. Using "path analysis" the dependent variable intent to leave was measured against independent variables, including integration, instrumental communication, formal communication, centralization, routinization, distributive justice, upward mobility, community participation, job satisfaction, opportunity pay, and work commitment. In looking at correlates of job satisfaction with various demographic variables, Martin found that job satisfaction increased with age, men seem to be less satisfied with their jobs than women, and individuals in higher occupational levels had less job satisfaction than those on lower occupational levels. Those factors having a significant correlation to intent to leave included job satisfaction ($r = -.37$), education ($r = .27$), age ($r = -.25$), and upward mobility ($r = -.22$).

The conclusion of this particular study was that determinants of the decision to leave were contextual in nature and that such factors as environmental, structural/process, and personal demographic variables "had a casual impact" on this decision. Martin concluded that the ultimate foundation on the theoretical basis for this general area of turnover research is Lewins (1955) formula for behavior: behavior is a function of the person combined with the environment ($B = F(P.E.)$).

In a study of hospital employees, Mobley (1978) investigated the contention of several researchers (Simon, 1958; Locke, 1968, 1976; and Mobley, 1977) that although the relationship of

satisfaction to turnover is weak, the critical role of dissatisfaction lies as a precursor to a chain of events that eventually lead to quitting behavior. This chain, again, as outlined in the Mobley model (Figure 2) included these steps: 1) thinking of quitting, 2) expected utility of the search, 3) intention to search, 4) search, (5) evaluation of alternatives, and 6) intention to quit.

According to Mobley (1978, p. 408):

The essence of this model is that a variety of cognitive and behavioral phenomena are occurring between the emotional experience of job dissatisfaction and the withdrawal behavior.

In this particular study (Mobley, 1978), 203 full-time employees in a medium sized southeastern hospital were given instruments measuring overall job satisfaction and facet satisfaction, using a 5-point behaviorally anchored scale to measure the precursors as outlined above. Turnover information was gathered 47 weeks after gathering the initial data. The relationship between age and turnover was a $-.25$, and the relationship between tenure and turnover was $r=.22$. Overall satisfaction yielded a $-.21$ correlation which was significantly less than the $.49$ correlation for the intent to quit time and actual turnover. Multiple regression analysis confirmed the hypothesized relation between the precursors of turnover and actual turnover.

Kraut (1975) confirmed the role of intent to remain as a powerful predictor of turnover in a study of salesmen in an American manufacturing company. The result of this early study showed intent to remain as being a valid predictor for both short term

turnover (less than 18 months) and long term turnover (18 months to 5 years). Kraut (1975, p. 237) worded the intent to remain item as follows: "If you have your own way, will you be working for this company five years from now? (1--Certainly, 2--Probably, 3--Not sure one way or the other, 4--Probably not, 5--Certainly not)." The results of this study revealed a greater percentage of turnover for those individuals who responded that they were "not sure" or "were not going to be working for the company in five years" ($P < .001$ for short term, $P < .05$ for long term). In another area of research, Kraut found that in examining various factors in relation to intent to remain, both the factors "work itself" and the overall rating of the company showed a significant positive correlation with the intent item ($P < .01$). Kraut recommends further investigation, particularly with a broader variety of educational groups.

In much of the research dealing with intentions, one of the intervening variables consistently scrutinized was the role of "external job opportunities" as it related to resignation and turnover. Mobley's model (1979) predicted that dissatisfied workers with good external job opportunities were more likely to leave. This construct is usually measured by asking the employee to estimate the probability of finding an acceptable employment alternative. A study by Dreher and Dougherty (1980) sought empirical evidence to understand better this variable through a study of a randomly selected group of managerial, technical, and professional employees. The authors used the U.S. Department of

Labor's Occupational Handbook classification system, available from the U.S. Department of Labor, to rate the job opportunities in the careers of those individuals who had voluntarily left their jobs and of those who remained. The findings of this study indicated that as competition in the labor market rises, there was a tendency towards a lower turnover rate. In effect, the study found that competition for expected job openings, as indexed by the USDL's handbook or other publications, were in themselves predictive of employee turnover.

Steel (1980) tested Mobley's theory and found support for the idea that a series of cognitive stages did indeed precede the actual turnover of an employee. Steel concluded (1980, p. 1):

Knowledge of the turnover proclivities of current employees may also be useful, on the other hand, in indicating the need for organizational interventions designed to alleviate the causes of worker discontent.

The value of the "behavioral intentions" variable lies in the fact that it is a well documented predictor of actual turnover and can therefore be of some use in studies that are non-longitudinal in nature. The evidence suggests, with a strong empirical support, that the intention variable is the final precursor to actual turnover, and it can therefore be appropriately utilized in any research examining turnover in an organization.

Organizational Commitment

Recently a great deal of attention has been focused on the variable of organizational commitment as it relates to various

aspects of employee behavior (Monday, Steers, and Porter, 1979). Commitment had been viewed alternately as an attitude and as an actual active relationship with an organization. Monday, et al. (1979) saw organizational commitment as differing significantly from the concept of job satisfaction. As an attitude, commitment is different from job satisfaction in that it should be more stable over time. Monday, et al. (1979, p. 227) stated:

Although day to day events in the work place may affect an employee's level of job satisfaction, such transitory events should not cause an employee to seriously re-evaluate his or her attachment to the overall organization.

Martin (1979) looked at "work commitment" when establishing his contextual model of employee turnover intentions and did not find it as a significant correlate to "intent to leave or stay" with an organization. Martin described the factor of work commitment as exhibiting characteristics that were similar to the concept of organizational commitment. This is consistent with the findings reported by Monday, et al. (1979, p. 226) who reported that although there is a consistent inverse commitment--turnover relationship, it was relatively weak:

To begin with, commitment as a construct is more global reflecting a general effective response to the organization as a whole. Job satisfaction, on the other hand reflects one's response either to one's job or to certain aspects of one's job. Hence, commitment emphasizes attachment to the employing organization, including its goals and values, while satisfaction emphasizes the specific task environment where an employee performs his or her duties.

The commitment variable was defined by these authors as "The relative strength of an individual's identification with and

involvement in a particular organization" and is viewed as having three separate components including: 1) strong belief and acceptance of the goals of an organization and its values; 2) the willingness to exert considerable effort on behalf of the organization; and 3) a strong desire to maintain membership in the organization (Monday, Steers, and Porter, 1979).

Most researchers who developed instruments to measure Organizational Commitment have relied on face validity, and so there appears to have been little effort to determine the stability, consistency, or predictive powers of many of these instruments (Monday, Steers, and Porter, 1979). The study by these authors, which is outlined below, shows that there was strong empirical evidence supporting the use of the construct of organizational commitment in assessing organizational behavior. Monday, et al. (1979) statistically analyzed data from several studies that examined the organizational commitment variable. Internal consistency reliability coefficient proved to be very high among all groups examined (public employees, hospital employees, bank employees, telephone company employees, scientists and engineers, auto company mechanics, psychiatric technicians) with a median coefficient of .90. Item analysis of the instrument used by the researchers (Organizational Commitment Questionnaire) revealed that each of the 15 individual items (see Appendix E) had a positive correlation with the overall score, with the range of average coefficients ranging from .36 to .72. The median

correlation was .64. Test-retest measures were also introduced to examine the effectiveness of the OCQ over time. For psychiatric technicians these reliability measures were $r = .53$ over two months, $r = .63$ over three months, and $r = .74$ over four months. Other test-retest scores with this instrument included a group of retail management trainees with a resulting correlation of $r = .72$ and $r = .62$ over two months and three months, respectively.

Convergent validity was examined in comparing the Organizational Commitment Questionnaire to the Organizational Attachment Questionnaire (Monday, et al., 1974). The validity estimates for the seven sample populations ranged from .63 to .74 with the median at .70. Additionally, a significant correlation was found between an "intent to leave" item and the OCQ. Another convergent index utilized in this study was "intrinsic motivation" which yielded correlations of .35 to .45 in four separate studies.

Further measures of psychometric scrutiny revealed an adequate level of discriminate validity when compared to various factors relating to job satisfaction. Correlations were highest with "work itself" and "overall satisfaction with the organization," and less related to JDI measures of satisfaction with work, promotions, supervision, pay, or coworkers.

Predictive validity for turnover on the Hom, Katerberg study (1979) revealed an $r = .58$ ($P < .05$). Also predicted at significant levels was turnover $r = .23$ ($P < .01$) and performance (significant at the $P < .05$ level) with four different groups of employees.

Additionally, the study produced some normative data for both men and women which showed responses at the 50th percentile for men as being between 5.0 and 4.75 (on a seven point scale), and the 50th percentile for women being between 5.0 and 5.25.

Another study undertaken that had examined the construct "organizational commitment" included a project by Mary Sheldon (1971) in which she examined doctoral level scientists and engineers in a private laboratory. Sheldon's (1971, p. 144) assumption was "that professionals with doctoral degrees, having been more fully socialized into the profession would be more likely to expect and to have professional prerogatives and less likely to desire organizational rewards." The results indicated that professionals with a high degree of commitment to their individual professions were less committed to the organization for which they worked. Investments in the organization (age, length of service, position) resulted in higher organizational commitment for those with long lengths of service, regardless of position. The study also found that professional commitment seemed to increase with work experience except for those who become involved in administration of the organization, which was found to increase organizational commitment.

Buchanon (1974) found other correlates of organizational commitment to include years of organizational service, social interaction with organizational peers and superiors, job achievement, and hierarchical advancement.

A study by Dubin (1975) examined the importance of an individual's work setting as a central life interest (expressed preference for carrying out their activities in given institutional settings) in relation to the organizational commitment of a worker. A sample of 1,014 blue-collar workers (male and female) from a bank and a telephone company revealed that those who had a high "central life interest" in their job had a correspondingly high level of organizational commitment. Low central life interest in a job revealed a correspondingly low level of organizational commitment.

And lastly, Oscar Grusky (1966) studied organizational commitment in a group of 2,198 managers and determined that commitment tended to be higher for those who had more obstacles to overcome in the context of their job, obstacles typically encountered by female employees or those employees who had only graduated from high school.

Three popular models of predicting turnover were competitively examined in a study by Hom, Katerberg, and Hulin (1979) involving 252 National Guardsmen. The models examined included a model of social behavior presented by Fishbein and Ajzen (1977). In this model, an individual's behavior is a function of a behavioral intention to perform that behavior ($B = F(BI)$), with behavioral intention (BI) being a function of determinants such as attitude towards performing the behavior (A_{act}) and a subjective norm regarding the behavior ($BI = w_1 A_{act} + w_2 SW = e_1$). The second model in this study included Porter's

Organizational Commitment variable which is the bond an employee has developed with an organization, a bond which is proposed to be a function of three factors; A) a strong belief in and acceptance of the organization's goals and values, b) A willingness to exert considerable effort on behalf of the organization, and C) A strong desire to maintain organizational membership. The final model studied was a measure of job satisfaction extracted from five Job Descriptive Index scales developed by Smith, Kendall, and Hulin (1969).

In the study by Hom, et al. (1979), inventories were administered to a large group of Guardsmen whose enlistment period was almost completed. Intercorrelations of the three tests were developed as they related to enlistment intention and actual enlistment. Each of the three models significantly predicted both criteria ($P < .05$). In predicting the actual act of re-enlistment, the Fishbein, Ajzen model appeared to be most effective ($R = .65$), the Organizational Commitment Model was the next most effective ($R = .58$), and the Satisfaction Model was least effective ($R = .55$).

The measurement of organizational commitment, with the introduction of the Organizational Commitment Questionnaire, is a potent, versatile, and reliable measure of employee attitude which has far-reaching use in organizational research. The bond that is developed between an employee and an organization is a more meaningful and significant measure than the often used "job

satisfaction" measure. Because of its predictive ability in turnover research and its high correlation with job satisfaction measures, the organizational commitment variable, as measured by the Organizational Commitment Questionnaire, is a variable that can be of great value in the study of any organization.

As mentioned earlier, the primary testing ground for studies involving job attitudes has taken place primarily within business and industrial settings. A primary reason for this has been a prevalent but apparently changing feeling that there is little applicability of business practices in higher education and, therefore, those tools used to provide direction and enlightenment for employees in the private sector were not openly embraced.

Job Satisfaction

Job satisfaction is a particular area of research in management that has resulted in countless studies. In spite of the time and attention this particular topic had elicited, there remained a great deal of controversy about the relationship of job satisfaction to productivity and regarding the nature of job satisfaction in general (Chung, 1977). Barbash (1976, p. 3) reported that:

There is a lot of inconclusive evidence insofar as whether satisfaction on the job is good, bad, important, unimportant, detrimental, inconsequential. Likewise there is no real consensus on its relationship to productivity or motivation. There is, however, a consensus that there is a problem of job satisfaction.

There were five basic theories of job satisfaction which represented the various perceptions of the nature of job

satisfaction and its relationship with productivity. These were identified by Lawler (1973) as fulfillment theory, discrepancy theory, equity theory, the two-factor theory, and the valence-satisfaction theory.

The Need Fulfillment theory originated with Maslow's theory of "Hierarchy of Needs," which stated that there were five basic levels of needs through which individuals progress including physiological, safety, socialization, self-esteem, and self-actualization needs. In a job setting it was hypothesized by proponents of this approach that satisfaction of lower level needs led to lower motivation. However, satisfaction of higher level needs led to higher motivation. "People who are in need-fulfilling job situations will be more satisfied than those who are in less fulfilling job situations" (Chung, 1976, p. 114). Accordingly, in this approach feelings of current satisfaction functioned to reduce motivational effort yet the anticipation of being able to achieve future satisfaction increased motivation.

Vroom (1964) developed a theory of satisfaction in which he viewed satisfaction as a future event, as opposed to a past gratification, in which this event was seen as the amount of anticipated need satisfaction or the valence (attractiveness) of an outcome. According to Chung (1976, p. 115): "The employee's motivation to produce then depends on the amount of anticipated outcome valences and the expectancy that his effort will result in task performance instrumental to receiving the valued outcomes."

This theory was in basic agreement with both the dual-factor theory and the need fulfillment theory in that satisfied needs were not the determinants of behavior but rather than unsatisfied needs stimulated behavior (Chung, 1976).

The discrepancy theory basically held that satisfaction resulted when an individual actually experienced what he expected to gain from a given performance. Dissatisfaction resulted from a perception of inequitable rewards. The definition of what led to satisfaction would differ from individual to individual, depending on what was expected as a reward. The individuals given credit for developing this theory included Porter and Lawler (1968) and Locke (1969, 1970).

Adams (1965) advanced a variation on the discrepancy theory known as the equity-inequity theory. This theory also underscored the importance of perceived reward in relation to effort. However, it contended that an employee would compare his input/reward ratio to other employees in the same work group. Dissatisfaction would result if there appeared to be inequities in this ratio, especially if the inequity resulted in a perception that one was getting less reward than a co-worker for the same amount of effort.

The two-factor theory (or dual-factor theory) was developed by Herzberg, Mausner, and Snyderman (1959) and has received a great deal of attention in the literature. Those subscribing to the "dual-factor" theory of job satisfaction have found support in the notion that factors leading to feelings of satisfaction or

dissatisfaction operated on two separate continua (see Figure 3): one continuum contained factors that at one end caused satisfaction and at the other end caused lack of satisfaction; and one continuum contained factors that at one end caused dissatisfaction yet at the other end caused lack of dissatisfaction. The theory postulated that those factors which led to satisfaction (alternately described in the literature as satisfiers, motivators, and content factors) could be generalized over any work setting; this proposition was based on the assumption that these factors satisfied needs common to all human beings. Factors described by Herzberg as satisfiers were: the nature of work itself, recognition, advancement, achievement, and responsibility. Those factors that were defined as dissatisfiers were associated with an individual's existence and socialization needs, and included such factors as: supervision, personal life, status, job security, working conditions, pay, etc.

Herzberg's theory was subjected to a great deal of criticism, and many researchers had difficulty duplicating the results of Herzberg's original study. Much of this criticism surrounded the methodology employed in his original study which utilized the "critical incident" method for obtaining data (Porter, Lawler, and Hackman, 1975). Further examination of these criticisms will be examined in more detail later in this section.

Although Herzberg's theory has not been totally accepted in industrial settings, one can note a very different response when

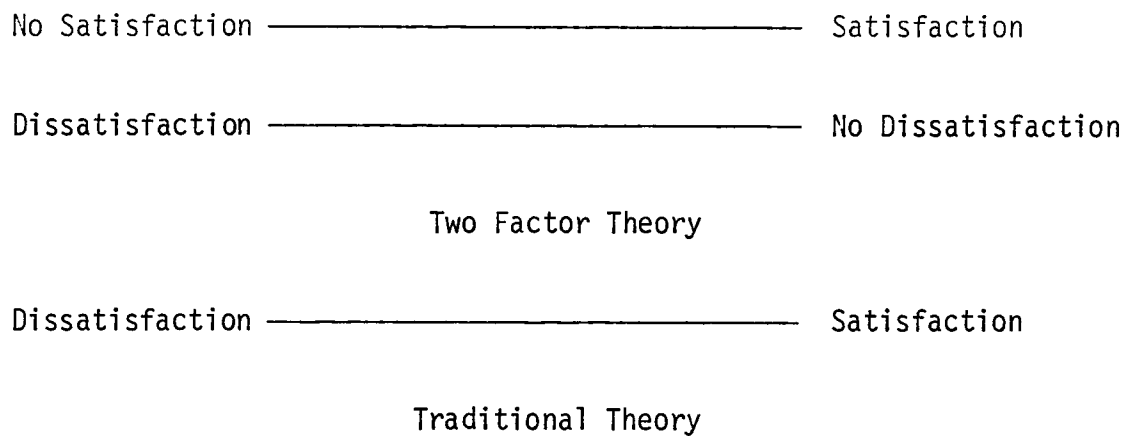


Figure 3. Concepts of job satisfaction. Source: Lyle Evan Darrow, "An Empirical Test of the Herzberg Two-Factor Theory of Job Satisfaction," unpublished doctoral dissertation, East Texas State University, 1971.

the theory has been researched in various educational settings. Several major studies in education have closely examined Herzberg's theory of job satisfaction (Ralph Savage, 1967; Schmidt, 1976; and Holdaway, 1978). These studies used different methodologies aimed at specific groups within the general field of education, and in each case, a certain amount of validity was established for explaining job satisfaction in education through use of the dual-factor theory of Fredrick Herzberg.

Herzberg's Original Study

The methodology Herzberg utilized consisted of structured interviews which were designed to permit the individual to remember both periods of job dissatisfaction and satisfaction. Individual respondents were asked to recall times when they felt either exceptionally good (a high feeling) or exceptionally bad (low feelings) about a particular job. Using content analysis, these feelings were then further analyzed to determine exactly what factors were having an effect on the subjects' feeling about the job (Herzberg, Mausner, and Synderman, 1959).

Herzberg's basic hypothesis in his 1959 study was that factors leading to negative attitudes about the job would differ from those attitudes leading to positive feelings about the job. He additionally hypothesized that several factors would be satisfiers if present on the job, but would not be dissatisfiers if absent; and different factors, if present on the job, would be

dissatisfiers. However, again, positive attitudes would not result due to their absence (Herzberg, et al., 1959).

The sample used for this first study consisted of 203 Pittsburg area accountants and engineers. As mentioned earlier, an interview was used to identify attitudes, effects, and factors (Korman, 1971). The specific question used by Herzberg was, "Think of a time when you felt exceptionally good or exceptionally bad about your job, either your present job or any other job you have had. . . . Tell me what happened" (Herzberg, et al., 1959). Herzberg (1959) defined attitudes as an individual's feelings of satisfaction or dissatisfaction; effects as the person's reaction to his/her feelings or attitudes; and factors as the objective occurrences or events which led to the attitude change in the first place. Once a high or low feeling was identified by a respondent, he/she was asked to analyze the feeling in terms of the actual sequence of events that led to it, and to describe how his/her work was affected. Independent judged filtered through over 5000 "thought units" to determine to which factors each unit related and whether or not they resulted in "high" or "low" feelings.

The results indicated that six of the factors were important in increasing actual job satisfaction of the subjects. These factors, which were also called "motivators" because of their alleged ability to increase productivity and retention, were: achievement, recognition, the work itself, responsibility, advancement, and the possibility for growth.

The factors that were identified as being associated with dissatisfaction (dissatisfiers) were found to be more closely related to the environment in which the worker performed his/her job. These factors, also known as hygiene factors, included salary, company policy and administration, supervision, personal life, status, work conditions, security, and interpersonal relations with superiors, subordinates and peers.

The results of this study strongly confirmed Herzberg's hypothesis and supported his proposition that factors which led to negative attitudes were different from those factors that led to positive attitudes. Also confirmed was the notion that factors concerned with work itself accounted for positive feelings about the job, while a separate set of environmental factors led to bad feelings about the job (Herzberg, 1959).

The following pages review several studies that are both critical and supportive of the Herzberg study. It will be evident in reading through these summaries that no real consensus has been reached on the validity of Herzberg's theory, especially as it applies to educational organizations. Popular management texts generally dismiss the theory as being conceptually "off the mark" and being over simplistic (Porter, Lawler, and Hackman, 1975; Weber, 1975).

General criticisms of the Herzberg theory are (Schmidt, 1976, p. 71):

1. The Theory is too simple.
2. The Theory is too rigid.

3. The Theory is stated too often in contradictory terms.
4. The results are method bound and are supportive of the theory only when the full Herzberg interview technique and analysis are used.
5. The interview technique does not lend itself to considering the defensive mechanisms that come into play in the respondents' answers.

Wolf (1970) criticized the Herzberg method by arguing that due to his use of the critical incident technique, the results tend to be biased. He also felt that the results were method bound due to the fact that people tended to remember and attribute causes of satisfaction to themselves and causes of dissatisfaction to things beyond their control in the environment. He also noted that people tended to remember and attribute causes of satisfaction to themselves and causes of dissatisfaction to the environment.

Studies Critical of the Dual-Factor Theory

Several studies generally considered critical of Herzberg's work include those by Graen and Hulin (1963), Graen (1963), Waters and Waters (1969), Malnovski and Berry (1965), Armstrong (1971), Burke (1960).

In the Graen and Hulin study (1963) a pencil and paper version of the Herzberg methodology was utilized with female home-office employees. The Job Descriptive Index (JDI) developed by Smith, Kendall, and Hulin (1969) was used to investigate the relationship of specific job factors to an overall measurement of job satisfaction. The results of this study yielded support for the single continuum model of job satisfaction. Two factors examined in this study

(work itself and promotion) were found to have a strong relationship with overall satisfaction and dissatisfaction. Those factors that would have predictably been dissatisfiers according to Herzberg (relationship with co-workers, supervision, and salary) showed "significant" relationship to job satisfaction only.

Another study by Graen (1963) yielded similar results. This particular study utilized 167 male and 152 female office workers. Once again the JDI was used to look at facet satisfaction while the General Motors Faces scale was used to evaluate overall satisfaction. Three factors, work itself, promotion and pay, were examined to see which of two competing concepts of job satisfaction (single v. dual continuum) was more accurate. The researchers used analysis of variance with each of the variables and found that the dual continuum model was supported for the "work itself" factor. The dual continuum factor was strongly disconfirmed for the two factors, pay and promotion. For female respondents, promotion was found to be consistent with Herzberg's theory while pay and work itself were not. Accordingly Graen noted (p. 76) that: "although failure by the two factor theory to predict four out of six relationships seemed discouraging enough, three of these four misses actually were opposite than predicted." The author's conclusion in this case was that Herzberg's results are method-bound.

Other studies utilizing paper-pencil tests, which had results similar to those reached by Graen, were studies by Waters and Waters (1969) and Atchison and Lefferts (1972). The Waters and Waters

study surveyed 160 non-supervisory clerical staff and revealed that the dual-factor theory was not applicable with this particular group of employees and that a single continuum model explained employee attitudes toward their jobs more accurately. Again, the conclusion of the authors was that Herzberg's theory is method-bound and that the "model offers little to the understanding of worker attitudes" (p. 391). A similar result was revealed in the Atchison, Leffert study which utilized Air Force pilots as subjects.

Studies Supportive of the Dual-Factor Theory

Lahari and Srivastva (1967) conducted yet another study which posed further questions designed to test the Herzberg contention that satisfaction and dissatisfaction did not exist on a single bi-polar continuum. Additional questions were examined including the ability dual-factor theory to have cross-cultural consistency, and whether or not the factors were similar to dissimilar when examining different job levels.

The sample for this particular study was 93 executives holding middle management positions in a variety of industries from Calcutta, Indiana. Each subject was given a paper and pencil instrument in which they were to rate each of 13 motivators and hygiene factors in terms of their contributions to satisfaction and dissatisfaction, respectively, in both their real job and an imaginary job. For the purpose of analyzing cross-cultural and job level results, data were obtained from the Friedlander (1964) study and the Herzberg, et al. (1959) study.

The results of this study supported Herzberg's contention that the same continuum could not be used to measure the same job-related feeling. Of 26 variables examined, 20 of these variables had a mean satisfaction score significantly higher than its mean dissatisfaction measure. Those variables that showed some signs of single linearity included: supervisor's help, salary, fairness of authority, freedom of expression, recognition, and growth. The results did not bear out Herzberg's notion that only intrinsic variables contribute significantly to satisfaction and only extrinsic variables contribute to dissatisfaction. When lumped into groups, the mean score of intrinsic variables (for differences between satisfiers and non-satisfiers) was not significantly different from extrinsic variables.

The data used to examine differences between management and blue-collar workers was tested via a rank-ordered correlation coefficient (ρ). The ranking revealed a significant relation ($p < .01$) between job grouping of those factors rated as sources of satisfaction, but an insignificant relation of job factors rated as dissatisfiers. In other words, blue-collar workers tended to report similar factors contributing to satisfaction as did management. However, factors contributing to dissatisfaction differed between the two groups.

When the data were examined for cross-cultural differences, no significant similarities were found.

The general conclusion of this study was that there is far too much rigidity in Herzberg's classification scheme where he

attributes satisfaction resulting only from intrinsic factors and dissatisfaction resulting only from extrinsic factors. The study lends support to the general feeling that there is value in the Herzberg theory in terms of the dual-continuum design, but that for various differences in positions, differing levels of needs must be met, and thus different factors would gain importance.

Other studies, particularly in education, have been far more supportive of Herzberg's findings.

In a test of the Herzberg theory in the field of education, Sergiovani (1967) found strong support for the theory. Utilizing the original format that was used by Herzberg in his original study, Sergiovani interviewed 20 male teachers and 41 female teachers representing a population of 3,382 teachers in Monroe County, New York. The data analysis strategy employed by Herzberg (content analysis) was also used in the study.

In examining subgroup differences, Sergiovani looked at gender, tenure, and differences between elementary school teachers and high school teachers. The results indicate that there are no significant differences within any of these subgroups in their responses to what caused high and low job attitudes.

Results indicated that the intrinsic variables achievement, recognition, and responsibility all led predominantly to teacher satisfaction while interpersonal relations (subordinates), interpersonal relations (peers), supervision-technical, school policy and administration, personal life, and fairness-unfairness were factors

that led predominantly to teacher dissatisfaction. Other factors appeared to be bi-polar contributing equally to satisfaction and dissatisfaction.

Savage (1967) utilized content analysis in a further test of the Herzberg theory in an educational setting. His findings supported the theory in that he found that factors leading to satisfaction were different from those factors leading to dissatisfaction, and that for the group of teachers studied, achievement, recognition, and interpersonal relations were the most significant factors affecting satisfaction. Savage also compared the ranking of those factors for teachers, with the rankings of the factors for accountants and engineers and found that factors affecting dissatisfaction were significantly different between the two groups.

The Schmidt (1976) study not only provided strong support for the Herzberg theory, but also found the factors were aligned in a manner consistent with the Motivation-Hygiene Theory. Other findings in the study were that the demographic variables examined had no significant impact on the motivation-hygiene theory.

The Schmidt study replicated the Herzberg study with supportive results. Again, as in many studies outside of education, motivators did not all line up as would be predicted by Herzberg. In this particular study, good interpersonal relations, especially with students, were motivators as opposed to hygiene factors.

The data were collected through written responses to Herzberg's basic interview questions. Respondents were 74

administrators selected from high schools in a suburban Chicago area. Content analysis was used for coding the events.

The Holdaway (1978) study was a recent investigation of the Herzberg dual-factor theory and its applicability to a group of teachers (K-12) in Alberta, Canada. A paper and pencil test was administered to a total of 1,379 teachers in which they were asked to rate their overall level of satisfaction with their job and then were asked to list those facets which contributed the most to their overall satisfaction and dissatisfaction, respectively. Factor analysis and PPMC was utilized to determine the clustering of factors that could be identified as contributing to satisfaction and dissatisfaction. Holdaway concluded from his findings that his study did provide general support for the dual-factor theory in that the "intrinsic" factors related more closely to satisfaction while extrinsic factors related more to dissatisfaction.

Although several theories other than the dual-factor theory are currently receiving more attention as "the state of the art" explanation of satisfaction in non-educational settings, there is clear support for its use in educational settings, particularly in regard to faculty. The uniqueness of the work environment in an educational setting may provide an explanation for this paradox. According to Maimon and Ronen (1978) "any comparison between two studies reporting the relative importance of extrinsic job aspects may be valid only if the employees in both groups perceive the range of extrinsic and intrinsic rewards to be similar" (p. 1021).

An additional advantage in utilizing a "facet centered" approach is the ability to examine a wide range of factors as they relate to positive or negative feelings about the job.

Applications of Job Attitude Research in Higher Education

Utilizing management skills in higher education has been an area of interest in recent years. Because the "transferability of expertise" issue was one that has raised a great deal of emotion within the "powers that be" in higher education, several studies were commissioned with the intent of trying to reach some worthwhile conclusions on this issue.

As mentioned earlier, the primary testing grounds for studies involving job attitudes have taken place within business and industrial settings. A primary reason for this has been a prevalent but apparently changing feeling that there is little applicability of business practices in higher education and, therefore, those tools used to provide direction and enlightenment for employees in the private sector were not openly embraced. Professionals from both business and higher education were brought together in the Academy of Educational Development (Millett, 1975) in order to study the possibility of applying business management skills to higher education. The conclusion of that highly qualified body was "that the fields are so different as to preclude any useful exchange of management skills" (p. 221). The primary reason for this difference according to Millett was that the end product of social institutions such as a university differ significantly from

the end product of a business (profit v. preserving an intellectual and cultural heritage, advancing knowledge, encouraging creative talent, and the cultural development of students).

In addition, Millet argued that the purposes and objectives of the institutions are entirely different. Learning is advanced in universities regardless of its impact when in private enterprise products are produced and the effect of those products are judged solely on the impact. In regard to the work force, the conclusion was that there was also a rather significant difference in that in business there is a more interdependent atmosphere where there is almost a "domino effect" if one employee is not performing at a desired standard. In contrast, in higher education, faculty are more or less completely independent, and their success or failure has very little to do with the success or failure of the organization. Also, in direct relation to this incompatibility, the very notion of output is different between the two types of organizations. Since the output of universities is difficult or even impossible to measure, Millet argued that the impact of managerial techniques may be an empty gesture.

Millet is emphatic in these conclusions but cautions those concerned with this issue that there is one developing issue that "could reverse" many of the above arguments to the point where there are many more similarities--the advent and increase of collective bargaining among faculty members in higher education.

Since the time the above-mentioned article was written, there have been some issues, including collective bargaining, which have caused a second look at the applicability of business practices in higher education. According to Michael Nicholson (1977, p. 46):

Collective bargaining has come to the campus because adverse market conditions have created dissatisfactions among faculties with respect to their standards of compensation, job security, and system of governance.

Besse (1973) wrote a book entirely devoted to comparisons between these two types of organizations. He concluded that there is some applicability and transferability of business practices to higher education and he pointed out that it is still important to keep in mind the differences between the types of employees that are drawn to these two types of organizations. Besse (1973, p. 116) stated:

Scholarly talent of a very high level is attracted by a university in large part because of the relatively free and unregimented work patterns that have historically typified the university professor. Executive talent is attracted to the business corporation with a full recognition of the control, regimentation, and drive inherent in successful performance. Both groups of talent are aware of the differences in earning potential that accompany these two life-work styles. It would be rash to conclude that these widely varying approaches have not over a long period of time attracted people with the attitudes and talents that best suit the objectives.

Clark Kerr (1980), Chairman of the Carnegie Commission on Higher Education, outlined factors relating to the uniqueness of universities as organizations (foreword, pp. xiv & xv):

1. They are unique in the way that they combine basic missions--instruction and the advancement of scholarly exploration--with an imposing array of other services and activities required by our society.

2. They are organizationally unique because no one has absolute authority within the organization. Presidents and faculty members operate in overlapping spheres of power and influence. New spheres of influences--overlapping the others--are now being occupied by students.
3. Ultimate authority for public and private organizations alike resides in governing boards whose membership comes from society at large or represents some other externally oriented constituency.
4. Universities tend to encompass for many of their members not only the work-associated aspects of their lives but the social and recreational aspects of their lives as well.
5. The outputs of universities are largely unmeasurable--their effectiveness cannot be assessed easily.
6. Although, legally, they are created by society, they stand quite apart from society in many ways. They are shielded to a considerable extent from external interference with the teaching and learning processes that take place within them; they are withdrawn from society by a tradition--that may be faltering--of disengagement from social and political activism.

Besse (1978) concluded that there is a great deal of possible application of business methods, tools, or techniques in higher education. These areas included the construction and operation of buildings; purchasing of supplies; control of costs, selection, retention, training, and promotion of employees; investment of funds; the designation of control centers; use of cost accounting; as well as many other operations. According to Besse (1978, p. 120): "We may conclude from these comparisons that the management techniques of business corporations have sufficient transferability to university operations to justify careful study by university administrators."

Trumble (1980) saw another critical issue relating to the "working environment" in our modern universities. Due to the problems arising out of the leveling off of student enrollment, other funding problems, the limiting effect tenure has on turnover, etc., the proportion of younger researchers in higher education was declining rapidly. There are insufficient opportunities for new Ph.D.s, and this is having an effect on both research and on the quality of faculty in our colleges and universities.

According to O'Toole (1978, p. 25):

In the 1960s the turnover rate among tenured faculty in American colleges and universities was about eight percent per year. Today with the academic labor market at its most stagnant state since World War II, the rate is probably far below one percent.

Not only have opportunities for bringing "new blood" decreased greatly over the last decade, there is ample evidence to show that faculty salaries have been lagging behind the rate of inflation. In a Carnegie Commission's (1980) report entitled "Three Thousand Futures," it was determined that the rate of advance of faculty salaries in constant dollars had slowed to a halt and since 1972-73, faculty real salaries have been dropping. By 1978-79 salaries reached a level nearly 10% below that of 1967-69. This downward pressure on salaries has led to an increasing feeling of insecurity on the part of faculty members due to the fact that they were caught between inflationary pressures on one hand, and greater competition for fewer job openings on the other. This tenuous position naturally led faculty to seek some kind of shelter which

many found in the form of collective bargaining which was an attempt to do together what they could not do singly to maintain a decent standard of living and insure job security. Robert Trumble (1980) identified several concerns that were very prevalent among newer faculty members. These concerns were: leveling off of student enrollment, tenure which limited faculty turnover, the effect on research if age shifts substantially, the effect of low turnover on quality of faculty, insufficient employment opportunities for new Ph.D.s, and the decline of access to funds for younger investigators.

The response to these nagging "personnel" related issues facing the critical working force in our institutions of higher education has been to apply some principles of management to faculty members in higher education. A study by Feiulle and Blandin (1974) examined faculty job satisfaction and bargaining sentiments. This particular study related faculty demographic and job satisfaction/dissatisfaction variables with expressed feelings towards collective bargaining at the University of Oregon. Prior to this study the university had declared a state of financial exigency which in some respects had dissolved tenure protection for faculty. As a result of this move, 42 faculty positions were eliminated, mostly through retirement and transfer. The result of this move and the ensuing nominal salary increases that same year had an impact on "perceived job security." The results of a study of 1010 academic personnel found that these economic changes did not affect their high level of satisfaction with teaching as a career, but there was a strong

indication of dissatisfaction with economic rewards attached to their jobs. According to Feiulle and Blandin (1974, p. 682):

"In terms of job content--job context differentiation, the respondents were satisfied with their work content but were somewhat dissatisfied with many of the contextual dimensions associated with their jobs."

Questions in this study aimed at measuring the favorability of collective bargaining revealed a positive set of perceptions among most of the respondents. ". . . Those respondents who indicated that they were dissatisfied with various conditions of their employment were significantly more inclined to indicate support for bargaining than were the respondents who were satisfied" (p. 687).

Other job attitude studies have been used in higher education including studies that have used the Job Descriptive Index (JDI) with college administrators (Smart, Moration, 1975). Bridges (1980) in a study of job satisfaction and teacher absenteeism found that as in similar studies in the private sector, there was not a strong relationship between teacher absenteeism and job satisfaction. Mirkel, DeFrain, and Wilcox (1980) found strong support for utilizing the expectancy theory of job satisfaction in higher education. These particular writers felt a need for increased research into the job attitudes of faculty members: "Although the knowledge base is rarely adequate in any managerial setting, the understanding of the characteristics of individual workers in educational organizations is an acute problem" (p. 71).

One of the logical culminations of the integration of management practices into the administration of higher education would be the increasing significance of the university personnel office in the handling of faculty personnel procedures. Kamerer, Mensei, and Baldrige (1981) state that "the administration of higher education is increasingly taking on the characteristics of corporate management. Two examples: the careful husbandry of resources in light of economic condition, and planning and marketing in response to economic changes" (p. 1).

A survey by these authors found a distinct trend away from the personal and individualized employment practices usually found in higher education in regard to faculty. It was also found that collective bargaining works towards formalizing relationships, including the legal issues surrounding dismissals in particularly tight labor markets. This kind of formalization was found to be favored more by newer faculty members who, because of their status, definitely had more to gain from this type of relationship.

According to Bruss and Kutine (1981) "Maintenance or renewal of faculty ability under conditions of static or shrinking financial support will be one of the most challenging problems facing higher education over the next decade" (p. 19).

With increasing acceptance of the use of management tools in higher education (Bruss, 1981) and some solid management theories that appear to have some validity for use in a wide variety of work settings, including higher education, the need for continued

research with these management theories in mind will be of value in higher education.

Knowledge gained through this kind of research will be of assistance in developing a keener understanding of the job attitudes of faculty members and will add more information regarding usefulness and universality of management research.

Summary

The preceding review of the literature revealed several variables that are of current value in examining the nature of employee attitudes and, therefore, have applicability in this study.

Behavioral intention as utilized in Mobley's (1977) model have had substantial support as a valid predictor of employee turnover. The value of "intent" as an index of current employee sentiment, would be of significant interest regardless of whether it actually resulted in turnover.

Although job satisfaction is a necessary element in any study of employee attitudes, another dimension of interest related to satisfaction was organizational commitment as measured by the Organizational Commitment Questionnaire (Monday, Steers, and Porter, 1979). Organizational commitment tended to reflect a more permanent and well developed bond with the organization whereas job satisfaction seemed to be a much more temporary measure.

The measurement of satisfaction as an employee attitude is based on a wide range of very different theoretical bases.

Herzberg's dual-factor theory received a great deal of support in educational settings and remained as a very useful tool in the measurement of employee attitudes for this group. Atchison and Leiffert (1972, p. 62) provided an argument for the valid use of paper and pencil tests in examining this theory:

A quantitative measure, in which Herzberg's motivator factors along with some other factors were put into a Likert scale form proved to distinguish very well between those officers who stayed and those who left.

The review of the literature also identified certain demographic variables that have been found to function as correlates in "turnover" research and would also be of value in examining the job attitudes of faculty.

CHAPTER III

RESULTS

In this chapter the findings relating to the 20 research questions are reported. This chapter includes a presentation of demographic data, examines data pertaining to the primary research questions which designated "intent to remain" as the dependent variable, and examines data pertinent to the secondary research question, which moves other variables into the position of the dependent variable.

Response to Questionnaire

The subjects for this study were randomly selected from a population of faculty members in institutions of higher education in the state of Tennessee. To attain a statistically representative sample of this particular population, the questionnaire used for this study was mailed to 300 subjects who were randomly selected from private institutions of higher education, public community colleges, and four-year public universities. Of 300 surveys sent, 213 usable surveys were returned and were utilized for this study. This figure translates to a usable response rate of 71%.

The first variable on the questionnaire was a question regarding the age of the respondents. The highest percentage of response was for the age grouping 30 to 40 years of age. The

distribution of these data was skewed towards the "older" faculty members (skewness 0.046) with only a cumulative number of 10 faculty members being under 30 years of age in this sample (Table 2).

The response rate for the "gender item" (Table 3) indicated that a vast majority of the respondents (70%) were men, and a minority of those responding were women (29.1%).

The level of education item revealed that a majority of respondents (126) had a doctorate (59.2%), 80 respondents (37.6%) had a Master's degree and only six respondents had a bachelor's degree or less (Table 4).

The response for the type of institution variable was somewhat shaped by the fact that a stratified sample was used which utilized a subsample from each of the three categories (public community college, private institution, or public university). The number of respondents corresponded in similar proportions to the percentages utilized in the stratified sample (see Table 5). The largest number of surveys was returned by faculty members at public universities (62.9%). However, as was noted in Table 1, page 18, a proportionately larger number of surveys was sent to faculty members in public universities.

Faculty rank (Table 6) responses were fairly flat over the ranks of full professor, associate professor, and assistant professor with response rates of 26.3%, 31%, and 32.9%, respectively. The only other response category was instructor

Table 2. Frequency distribution by age for all faculty members in sample distribution.

Category Label	Frequency	Percent
Less than 25 years or less	1	0.5
25 years but less than 30 years	9	4.2
30 years but less than 40 years	74	34.7
40 years but less than 50 years	69	32.4
50 years but less than 65 years	54	25.4
65 or older	6	2.8
Total	213	100.0

Table 3. Frequency distribution of respondents by gender for all faculty members in sample distribution.

Category Label	Frequency	Percent
Male	149	70.0
Female	62	29.1
	2	0.9
Total	213	100.0

Table 4. Frequency distribution by level of education for all faculty members in sample distribution.

Category Label	Frequency	Percent
Two-year College	2	0.9
Bachelor's	4	1.9
Master's	80	37.6
Doctorate	126	59.2
	1	0.5
Total	213	100.0

Table 5. Frequency distribution by type of institution for all faculty members in sample distribution.

Category Label	Frequency	Percent
Public Community College	40	18.8
Private Institution	39	18.3
Public University	134	62.9
Total	213	100.0

Table 6. Frequency distribution by faculty rank for all faculty members in sample distribution.

Category Label	Frequency	Percent
Professor	56	26.3
Associate Professor	66	31.0
Assistant Professor	70	32.9
Instructor	17	8.0
	4	1.9
Total	213	100.0

which yielded 17 responses or 8%. The length of service (Table 7) item revealed a general "bell shaped curve" response with the largest number of respondents having served between 2-15 years.

A majority of faculty indicated that they were tenured (63.4%) versus faculty that indicated that they were non-tenured (36.6%) (see Table 8). Married faculty members also outnumbered unmarried faculty 180 (84.5%) to 32 (15%) in this sample (Table 9).

Frequency Distributions of Dependent Variables

The item in this study designed to be the best predictor of future turnover was the "intent to remain" item. Respondents were presented with the question, "If I have my own way, I will be

Table 7. Frequency distribution by length of service for all faculty members in sample distribution.

Category Label	Frequency	Percent
Less than 2 years	17	8.0
2 years but less than 5 years	52	24.4
5 years but less than 10 years	41	19.2
10 years but less than 15 years	52	24.4
15 years but less than 20 years	25	11.7
20 years and over	26	12.2
Total	213	100.0

Table 8. Frequency distribution of tenured v. non-tenured faculty for all respondents in sample distribution.

Category Label	Frequency	Percent
Tenured	135	63.4
Not Tenured	78	36.6
Total	213	100.0

Table 9. Frequency distribution of married v. unmarried faculty respondents for all faculty in sample distribution.

Category Label	Frequency	Percent
Married	180	84.5
Not Married	32	15.0
	2	0.5
Total	213	100.0

working here a year from now." The response selection for this item ranged from "strongly agree" to "strongly disagree" and included a neutral response, "don't agree or disagree." The mean response for this item was 1.910 and was strongly skewed towards the "strongly agree" response. The frequency distribution for this item is outlined in Table 10.

The measure of organizational commitment is actually derived from an arithmetic averaging of the items in the "Organizational Commitment Questionnaire." Although responses from each of the items making up this questionnaire were individually tabulated, the only measure of true interest in this study was the final measure of organizational commitment; thus only the compiled statistics of this measure were presented. The mean response for this measure over the entire sample was 5.14 (Table 11) which was

Table 10. Frequency distribution of responses to the intent to remain item for all faculty in sample distribution.

Category Label	Frequency	Percent
Strongly Agree	96	45.1
Agree	70	32.9
Don't Agree or Disagree	23	10.8
Disagree	15	7.0
Strongly Disagree	8	3.8
	1	0.5
Total	213	100.0

Table 11. Frequency distribution of scores on the Organizational Commitment Questionnaire for all faculty in sample distribution.

Category Label	Frequency	Percent
Strongly Disagree	4	1.9
Moderately Disagree	3	1.4
Slightly Disagree	4	1.9
Neither Disagree or Agree	7	3.3
Slightly Agree	15	7.0
Moderately Agree	66	31.0
Strongly Agree	114	53.5
Total	213	100.0

skewed towards the "strongly agree" end of the scale. (The OCQ scale consisted of 7 response options ranging from 1-strongly disagree to 7-strongly agree.)

A total of 32 questionnaire items generated data responses designed to investigate a number of job facets and examined the facets in terms of their contribution to feelings of satisfaction or dissatisfaction about the job. The 16 job facets utilized in this study included: recognition, achievement, work itself, responsibility, advancement, possibility for growth, supervision, personal life, status, job security, working conditions, relationship with superiors, relationship with co-workers, relationship with subordinates, university policy and administration, and salary. The responses on each item ranged from maximum contribution (10) and minimum contribution (1). The specific items can be further examined in Appendix E.

Mean responses were computed for each item relating to positive feelings about the job which can be seen in Table 12. The "job facet" which ranked highest in regard to "positive feelings" about the job was the factor work itself which had an overall mean response of 8.197. The lowest mean response was for the facet supervision which had an average rating of 5.121.

The job facet that had the highest mean response in relation to "negative feelings" (Table 13) about the job was university policy and administration which had a mean response of 6.396. On the other end of the scale, the item which had the lowest mean

Table 12. Rank and mean scores for the sixteen factors on the Job Factor Questionnaire that relate to positive feelings about the job, for all faculty in sample distribution.

Factor	Rank	Score
Work Itself	1	8.197
Achievement	2	7.897
Rel. with Co-workers	3	7.751
Responsibility	4	7.488
Recognition	5	6.981
Rel. with Subordinates	6	6.969
Rel. with Superiors	7	6.856
Possibility for Growth	8	6.734
Personal Life	9	6.469
Job Security	10	6.291
Status	11	6.136
Working Conditions	12	6.131
Advancement	13	5.751
Salary	14	5.258
University Policy and Administration	15	5.183
Supervision	16	5.121

Table 13. Rank and mean scores for the sixteen factors on the Job Factor Questionnaire that relate to negative feelings about the job, for all faculty in sample distribution.

Factor	Rank	Score
University Policy and Administration	1	6.396
Recognition	2	6.131
Supervision	3	5.873
Salary	4	5.781
Advancement	5	5.596
Possibility for Growth	6	5.516
Rel. with Superiors	7	5.315
Achievement	8	5.286
Responsibility	9	5.009
Work Itself	10	4.343
Working Conditions	11	4.804
Personal Life	12	4.161
Job Security	13	4.042
Rel. with Co-workers	14	4.034
Status	15	3.512
Rel. with Subordinates	16	3.407

score, thus the lowest contribution to negative feelings about the job, was relationship with subordinates which had a mean response of 3.407.

An additional computation had to be made with data from the Job Factor Questionnaire in order to address the overall direction of these factors when both the positive and negative contributions were analyzed as one factor. By creating one variable by combining both the positive and negative "contribution rating" of each factor, it became possible to examine the relative strength of each factor when examined against other variables in this study. This new variable was created by entering a command into the SPSS program that created the new variable (F) by subtracting the variable where the factor was rated as having a negative impact on feeling from the job, from the same variable when ranked as having positive impact on feelings about the job ($F = X_1 - Y_2$).

The computed F values for differences in the means of each factor's contribution to positive and negative feelings about the job ranged from a high F value of 3.854 for the factor "work itself" to a low F value of -1.212 for the factor "university policy and administration." Only three factors--university policy and administration, supervision, and salary--had a net value which was negative. The mean scores for each F value and the ranking of the corresponding value can be seen in Table 14.

Table 14. Rank and mean scores for the sixteen factor values for the corresponding sixteen Job Factor Questionnaire items for all faculty in the sample distribution.

Factor	F-Value	Rank
Work Itself	3.8544	1
Relationship with Co-workers	3.7183	2
Relationship with Subordinates	3.5634	3
Status	2.6244	4
Achievement	2.6103	5
Responsibility	2.4789	6
Personal Life	2.3099	7
Job Security	2,2488	8
Relationship with Superiors	1,5399	9
Working Conditions	1,3286	10
Possibility for Growth	1,2160	11
Recognition	.8498	12
Advancement	.1549	13
Salary	-.5305	14
Supervision	-.8545	15
University Policy and Administration	-1.2113	16

Response to Research Questions

Research Question #1--Does a faculty member's degree of "intent to remain" with an organization vary depending on whether that faculty member teaches at a public university, public community college, or at a private college or university?

The mean response across the item "intent to remain" for "type of institution" revealed a mean response of 1.910 for the entire population sampled, 1.900 for the community college faculty, 1.744 for the faculty at private institutions, and 1.962 for faculty at public universities. Analysis of Variance was used to analyze these data revealing a between groups F-ratio of .611 with a significance level of $P=.5438$ (see Table 15).

The mean response to this item for the entire population revealed a fairly high level of intent to remain for the whole group. No significant differences were revealed between any two groups insofar as this particular measure is concerned. The greatest disparity in measurement occurred between faculty members in public universities who had a lower mean "intent to remain" score than faculty members in community colleges or private institutions. Faculty members at private institutions had the highest degree of intent to remain of the three sub-populations.

Research Question #2--Do faculty members vary in their intent to remain depending on their level of organizational commitment as measured by the Organizational Commitment Questionnaire?

Table 15. Analysis of variance of type of institution, expressed satisfaction, and organizational commitment with intent to remain.

Source	D.F.	S.S.	M.S.	F
<u>Type of Institution</u>				
Between Groups	2	1.4493	0.7247	0.611
Within Groups	209	247.8467	1.1859	
Total	211	249.2960		
<u>Expressed Satisfaction</u>				
Between Groups	4	71.0002	17.7500	20.824**
Within Groups	204	173.8887	0.8524	
Total	208	244.8889		
<u>Organization Commitment</u>				
Between Groups	2	23.8614	11.9307	11.982**
Within Groups	206	205.1132	.9959	
Total	208	228.9746		

**p < .01.

A One-way Analysis of Variance was used to determine if there were any significant differences between scores of respondents on the Organizational Commitment Questionnaire in their expressed level of intent to remain. The mean response for the entire population was 1.914, with a score of "1" indicating the highest level of intent possible on the scale (see Table 15). The F ratio on this item was 17.250 which was highly significant ($P < .001$).

The results of this test indicate very significant differences in the degree of intent to remain expressed by individuals who are highly committed v. those who express a lesser degree of organization commitment. Those faculty members who scored higher on the Organizational Commitment Questionnaire had a significantly higher "intent to remain" at the institution. To further analyze these data in terms of the "relationship" between these two items, a Pearson Product Moment Correlation was run revealing an r of -0.72 which was significant at the $P < .001$. This statistic reiterates the fact that intent to remain has a positive relationship to level of Organizational Commitment.

Research Question #3--Does a faculty member's expressed level of "intent to remain" vary depending on his expressed level of job satisfaction?

One-way Analysis of Variance was used to determine whether or not differences exist between faculty members reporting differing levels of job satisfaction in their expressed level of intent to remain. The F-ratio computed for this item was 20.824 which was highly significant at the $P < .001$ level (see Table 15).

The results of this test would tend to reveal that there is a strong difference in the level of "intent to remain" expressed between faculty members who report higher levels of overall job satisfaction and those who express lower levels of overall job satisfaction. Those who express a higher level of "intent to remain" also express a higher level of satisfaction with their job. Again, a Pearson Product Moment Correlation coefficient was calculated revealing an r of .73 for this relationship which also proved to be highly significant ($P < .001$) and pointed to a strong positive relationship between intent to remain and expressed job satisfaction.

Research Question #4--When the "intent to remain" item is grouped by the demographic variables age, gender, highest level of education, faculty rank, tenure, marital status, and length of service, is there a significant difference in the level of intent to remain expressed within each of these variables?

In order to determine the level of significance between variables where more than two variables exist (age, level of education, faculty rank, length of service), One-way Analysis of Variance was utilized. For those items having only two response alternatives (gender, tenure v. non-tenure, and marital status), a two-tailed t -test was utilized. Only the item, tenure v. non-tenure, revealed a significant difference when examined with the "intent to remain" item. The t -value for the tenure item was 2.93 which was significant at the $P < .004$ level. Statistical data for demographic

variables measured against "intent to remain" are presented in Table 16 for paired t-tests, and Table 17 for One-way Analysis of Variance.

According to the findings of this particular item, non-tenured faculty have a far lower level of intent to remain than tenured faculty.

Research Question #5--When "intent to remain" is examined in terms of various "factors" relating to positive or negative feelings about the job, is there a significant difference in the contribution of these 16 factors on the JFQ to various levels of "intent to remain?"

Of the 16 variables, four variables (or facets) revealed a significant difference when analyzed with the "intent to remain" item. These factors were recognition, advancement, growth in the job, and job security (see Table 18). In the case of recognition, advancement, and growth, the mean for each factor was highest for faculty members with the highest level of "intent to remain." These factors contributed significantly more to dissatisfaction for those with lower levels of "intent to remain." The factor, job security, was ranked as a positive contributor to feelings about the job by both ends of the "intent to remain" continuum, with the difference occurring between the response "do not agree or disagree" ($\bar{x}$ 1.26), and the highest level of intent and the lowest level of intent ($\bar{x}$ 3.22, 3.37).

Table 16. Independent t-tests of demographic variables; gender, tenure, and marital status with intent to remain.

Variable	M	S.D.	t
<u>Gender</u>			
Male	1.9530	1.099	1.02
Female	1.7869	1.066	
<u>Marital Status</u>			
Unmarried	2.1875	1.120	1.59
Married	1.8492	1.068	
<u>Tenure Status</u>			
Tenured	1.7463	.979	2.78**
Not Tenured	2.1923	1.207	

*P < .01.

**P < .001.

Table 17. Analysis of variance of demographic variables; age, level of education, faculty rank, length of service with intent to remain.

Source	D.F.	S.S.	M.S.	F
<u>Age</u>				
Between Groups	5	7.7582	1.5516	1.323
Within Groups	206	241.5382	1.1725	
Total	211	249.2964		
<u>Level of Education</u>				
Between Groups	3	2.4173	0.8058	0.676
Within Groups	207	246.8704	1.1929	
Total	210	249.2877		
<u>Faculty Rank</u>				
Between Groups	3	4.3291	1.4430	1.216
Within Groups	204	242.1122	1.1868	
Total	207	246.4413		
<u>Length of Service</u>				
Between Groups	5	21.0960	4.2192	3.809
Within Groups	206	228.2004	1.1078	
Total	211	249.2964		

*P < .05.

**P < .01.

Table 18. Analysis of variance of the sixteen Job Factor Questionnaire factors with intent to remain.

Source	D.F.	S.S.	M.S.	F
<u>Recognition</u>				
Between Groups	4	257.6384	64.4096	3.703**
Within Groups	207	3600.2312	17.3924	
<u>Achievement</u>				
Between Groups	4	82.8801	20.7200	1.596
Within Groups	207	2687.8216	12.9846	
<u>Work Itself</u>				
Between Groups	4	29.9855	7.4964	0.618
Within Groups	207	2512.8127	12.1392	
<u>Responsibility</u>				
Between Groups	4	74.9422	18.7355	1.208
Within Groups	207	3209.6579	15.5056	
<u>Advancement</u>				
Between Groups	4	185.7473	46.4368	2.614*
Within Groups	207	3677.2685	17.7646	
<u>Possibility for Growth</u>				
Between Groups	4	367.2488	91.8122	5.213**
Within Groups	207	3645.8066	17.6126	
<u>Supervision</u>				
Between Groups	4	162.0022	40.5005	1.709
Within Groups	207	4905.7339	23.6992	
<u>Personal Life</u>				
Between Groups	4	49.5685	12.3291	0.887
Within Groups	207	2891.8632	13.9704	
<u>Status</u>				
Between Groups	4	107.3277	26.8319	2.405*
Within Groups	207	2309.5768	11.1574	
<u>Job Security</u>				
Between Groups	4	130.5956	32.6489	1.932
Within Groups	207	3497.5964	16.8966	

Table 18 (Continued)

Source	D.F.	S.S.	M.S.	F
<u>Working Conditions</u>				
Between Groups	4	91.2803	22.8201	1.342
Within Groups	207	3520.8901	17.0091	
<u>Relationship w/Superiors</u>				
Between Groups	4	144.0725	36.0181	1.571
Within Groups	207	4744.7382	22.9214	
<u>Relationship w/Co-workers</u>				
Between Groups	4	83.2942	20.8235	1.219
Within Groups	207	3535.2678	17.0786	
<u>Relationship w/Subord.</u>				
Between Groups	4	44.8373	11.2093	0.824
Within Groups	207	2817.3511	13.6104	
<u>Policy & Administration</u>				
Between Groups	4	100.8965	25.2241	1.209
Within Groups	207	4317.6660	20.8583	
<u>Salary</u>				
Between Groups	4	184.8592	46.2148	2.158
Within Groups	207	4433.6484	21.4186	

*P < .05.

**P < .01.

Research Question #6--Does a faculty member's level of organizational commitment vary depending on whether that faculty member teaches at a public university, a public community college, or at a private college or university?

In utilizing One-way Analysis of Variance for this research question, it was determined that the F-Ratio on the item comparing organizational commitment and "type of institution" was 11.982 which was significant at the $P < .001$ level (Table 19). The mean response for all faculty members on the Organizational Commitment Questionnaire was 5.14. Group means across this item were: 5.3846 for faculty members at private colleges, 5.7369 for faculty members at community college situations of higher education, and 4.8939 for faculty members at public universities. Again, the range of responses on the Organizational Commitment Questionnaire were from 1 to 7 with 7 being the highest level of organizational commitment attainable on the scale, and 1 being the lowest.

Based on the application of the a-posteriori Scheffe test, these findings reveal that those faculty members in public institutions of higher education are significantly less committed than are their counterparts in the community colleges, and that faculty members in public four-year universities appear to be far less committed (but not significantly less) than faculty in private universities.

Research Question #7--Will a faculty member's level of "organizational commitment" vary depending on his expressed level of job satisfaction?

Table 19. Analysis of variance of type of institution and satisfaction with organizational commitment.

Source	D.F.	S.S.	M.S.	F
<u>Type of Institution</u>				
Between Groups	2	23.8614	11.9307	11.982**
Within Groups	206	205.1132	0.9957	
Total	208	228.9746		
<u>Expressed Satisfaction</u>				
Between Groups	4	83.5077	20.8769	29.116**
Within Groups	201	144.1224	0.7170	
Total	205	227.6301		

**p < .01.

For this question, Analysis of Variance was again utilized to determine whether or not there was a significant difference in the level of organizational commitment a faculty member expressed when grouped according to levels of expressed satisfaction. The F-Ratio on this item was 29.116 ($P < .001$) indicating that there are indeed differences in organizational commitment. Those expressing the highest level of job satisfaction had a $\bar{x}$ organizational commitment score of 3.67 (Table 19).

The results of this analysis show that high organizational commitment is strongly tied to high levels of high satisfaction. As would be expected, there are indeed differences in organizational commitment. Those expressing the highest level of job satisfaction had a $\bar{x}$ organizational commitment score of 3.667.

The results of this analysis show that organizational commitment is strongly tied to job satisfaction. As would be expected, the Pearson Product Moment Correlation Coefficient computation of these items revealed a strong positive relationship ($r=.76$, $P < .001$).

Research Question #8--When the "Organizational Commitment" variable is treated as the dependent variable and is grouped by the demographic variables age, gender, highest level of education, faculty rank, tenure, marital status, and length of service, is there a significant difference in the level of organizational commitment expressed within each of these variables?

For this item One-way Analysis of Variance was utilized in examining the dependent variable (Organizational Commitment) with the variables age, level of education, faculty rank, and length of service. The individual differences within each of these variables failed to yield a significant F-Ratio (Table 20). In order to examine the variables gender, tenure, and marital status, a two-tailed t-test was used against the variable "orgcom." Of those three variables, only "gender" revealed a significant difference in mean organizational commitment score. The mean response for women was 5.4426 while the mean response for their male counterparts was 5.025 ($t = 2.83$, $P = .008$) (Table 21).

Accordingly, women appear to be more organizationally committed than men. In examining these scores against normative tables drawn up for the Organizational Commitment Questionnaire (Monday, Steers, and Porter, 1979), the women's Organizational Commitment Questionnaire score when rounded ranked in the 67.1% for all women, while the men's score when rounded ranked in the 55.7 percentile.

Research Question #9--When Organizational Commitment is examined in terms of the 16 factors on the JFQ as they relate to positive or negative feelings about the job, is there a significant difference in the "mean difference" value of these 16 factors to various levels of the organizational commitment measure?

To address this question, responses on the 16 items pertaining to contributions to "bad feelings" about the job were subtracted from the same 16 items where respondents rated those factors in terms of

Table 20. Analysis of variance of demographic variables; age, level of education, faculty rank, and length of service with organizational commitment.

Source	D.F.	S.S.	M.S.	F
<u>Age</u>				
Between Groups	5	7.1748	1.4350	1.313
Within Groups	203	221.8001	1.0926	
Total	208	228.9749		
<u>Level of Education</u>				
Between Groups	3	2.1410	0.7137	0.642
Within Groups	204	226.8149	1.1118	
Total	207	228.9560		
<u>Faculty Rank</u>				
Between Groups	3	2.3596	0.7865	0.707
Within Groups	201	223.5904	1.1124	
Total	204	225.9499		
<u>Length of Service</u>				
Between Groups	5	9.0392	1.8078	1.669
Within Groups	203	219.9358	1.0834	
Total	208	228.9749		

*P < .05.

**P < .01.

Table 21. Independent t-tests of demographic variables; gender, tenure, and marital status with organizational commitment.

Variable	M	S.D.	t
<u>Gender</u>			
Male	5.0205	1.060	2.83**
Female	5.4426	.940	
<u>Tenure Status</u>			
Tenured	5.2424	.974	1.80
Not Tenured	4.9610	1.152	
<u>Marital Status</u>			
Married	5.1591	1.041	.749
Not Married	5.0938	1.058	

**P < .001.

the positive feeling they expressed from their job. The result of this calculation resulted in a distinct score for each factor representing its value as a contributor to positive feelings about the job (positive score), or to negative feelings about the job (negative score). These scores, representing both direction and magnitude of the impact of each of the 16 factors, were examined against scores on the "Organizational Commitment" item utilizing 16 One-way Analysis of Variance tests.

Of the 16 variables, only two variables, personal life and relation to subordinates, failed to yield a significant F-Ratio. The factors recognition, achievement, work itself, responsibility, advancement, growth, supervision, job security, working conditions, relationships with superiors, relationships with co-workers, policy and administration and salary all had significantly higher scores for those who had high levels of organizational commitment. Those having lower OCQ scores tended to see all of these factors as contributing significantly more to negative feelings about the job than their higher OCQ counterparts (see Table 22).

Research Question #10--Does a faculty member's expressed level of job satisfaction vary depending on whether that faculty member teaches at a public university, a public community college, or at a private college or university?

Using Analysis of Variance, faculty members at three different "groups" of institutions of higher education were examined in terms of those faculty members' expressed level of job satisfaction.

Table 22. Analysis of variance of sixteen Job Factor Questionnaire factor values computed with intent to remain.

Source	D.F.	S.S.	M.S.	F
<u>Recognition</u>				
Between Groups	5	827.3358	165.4671	11.074**
Within Groups	203	3033.0980	14.4671	
<u>Achievement</u>				
Between Groups	5	170.6464	34.1293	2.700*
Within Groups	203	2566.2876	12.6418	
<u>Work Itself</u>				
Between Groups	5	154.8944	30.9789	2.631*
Within Groups	203	2389.8578	11.7727	
<u>Responsibility</u>				
Between Groups	5	545.9937	109.1987	8.143**
Within Groups	203	2722.2412	13.4101	
<u>Advancement</u>				
Between Groups	5	528.2510	105.6502	6.478*
Within Groups	203	3310.8255	16.3095	
<u>Possibility for Growth</u>				
Between Groups	5	799.0920	159.8184	10.084**
Within Groups	203	3217.3229	15.8489	
<u>Supervision</u>				
Between Groups	5	669.7015	133.9403	6.322*
Within Groups	203	4300.6843	21.1856	
<u>Personal Life</u>				
Between Groups	5	117.2122	23.4424	1.687
Within Groups	203	2820.2256	13.8927	
<u>Status</u>				
Between Groups	5	236.4159	47.2832	4.398*
Within Groups	203	2182.4598	10.7510	
<u>Job Security</u>				
Between Groups	5	447.1878	89.4375	5.835*
Within Groups	203	3111.5723	15.3279	

Table 22 (Continued)

Source	D.F.	S.S.	M.S.	F
<u>Working Conditions</u>				
Between Groups	5	338.4684	67.6937	4.264*
Within Groups	203	3222.7125	15.8754	
<u>Relationship w/Superiors</u>				
Between Groups	5	1248.2324	249.6465	14.459**
Within Groups	203	3504.9960	17.2660	
<u>Relationship w/Co-workers</u>				
Between Groups	5	303.3571	60.6714	3.790*
Within Groups	203	3249.6898	16.0083	
<u>Relationship w/Subord.</u>				
Between Groups	5	136.0449	27.2090	2.054
Within Groups	203	2688.5549	13.2441	
<u>Policy & Administration</u>				
Between Groups	5	916.6980	183.3396	10.932**
Within Groups	203	3404.5982	16.7714	
<u>Salary</u>				
Between Groups	5	249.9399	49.9880	2.327*
Within Groups	203	4361.6598	21.4860	

*P < .05.

**P < .01.

The mean response for this item across the entire population was 1.92 with a response of "1" being the highest level of satisfaction on the scale, and a score of 5 being the lowest level of job satisfaction. The mean response for the different subgroups in this study were 1.75 for faculty members at public community colleges, 1.51 for faculty members at private institutions, and 2.09 for faculty members at public universities. Analysis of these differences revealed an F-ratio of 6.19, significant at the $P = .0025$ level (Table 23).

Based on the application of the a posteriori Scheffe test, the results of this statistical test showed that faculty at private institutions of higher education expressed a significantly greater degree of job satisfaction than their counterparts in public institutions of higher education.

Research Question #11--When the "expressed satisfaction" variable is treated as the dependent variable and is grouped by the demographic variables age, gender, highest level of education, faculty rank, tenure, marital status and length of service, is there a significant difference in the expressed level of satisfaction within each of these variables?

One-way Analysis of Variance was utilized for the examinations of the variables age, highest level of education, faculty rank, and length of service. The F-Ratio computed for each of these variables against expressed satisfaction failed to yield an acceptable level of significance (Table 24). The variables, gender, tenure and marital status, were examined utilizing a two-tailed t-test and were

Table 23. Analysis of variance of type of institution by expressed satisfaction.

Source	D.F.	S.S.	M.S.	F
<u>Type of Institution</u>				
Between Groups	2	11.4793	5.7397	6.183**
Within Groups	207	192.1433	0.9282	
Total	209	203.6226		

**P < .01.

Table 24. Analysis of variance of demographic variables age, level of education, faculty rank, length of service with expressed satisfaction.

Source	D.F.	S.S.	M.S.	F
<u>Age</u>				
Between Groups	5	2.9122	0.5824	0.592
Within Groups	204	200.7107	0.9839	
Total	209	203.6229		
<u>Level of Education</u>				
Between Groups	3	0.6722	0.2241	0.226
Within Groups	205	202.9436	0.9900	
Total	208	203.6158		
<u>Faculty Rank</u>				
Between Groups	3	2.3085	0.7695	0.786
Within Groups	202	197.8702	0.9796	
Total	205	200.1788		
<u>Length of Service</u>				
Between Groups	5	7.7523	1.1505	1.186
Within Groups	204	197.8709	0.9700	
Total	209	203.6233		

*P < .05.

**P < .01.

not found to be significant at the .05 level of significance (Table 25).

Research Question #12--When respondents are grouped by gender, are there differences in the mean differences between the 16 items on the JFQ in their contribution to positive or negative feelings about the job?

In order to respond to this research question, the differences of each factor's contribution to positive feelings about the job v. negative feelings about the job were computed. Using the resulting "mean difference" calculation, 16 two-tailed t-tests were employed to determine whether or not any significant differences in the mean scores were evident.

Data in Table 26 revealed that when grouping the data by gender, only one factor yielded a significant difference at the .05 level while three factors yielded a substantial difference in means at a less stringent level of significance ($P < .10$). While men rated the factor, recognition, as having almost a neutral effect on "feelings" about the job, women rated that factor as contributing to positive feelings about their job ($t = 2.4$, $\bar{x} = 1.85$). This difference was significant at the $P < .05$ level.

Research Question #13--When respondents are grouped by age, are there differences in the mean differences between the 16 items on the JFQ in their contribution to positive or negative feelings about the job?

Table 25. Independent t-tests of demographic variables; gender, tenure, and marital status with expressed satisfaction.

Variable	M	S.D.	t
<u>Gender</u>			
Male	1.9864	1.020	2.00
Female	1.7213	.799	
<u>Tenure</u>			
Tenured	1.8271	.925	1.71
Not Tenured	2.0779	1.073	
<u>Marital Status</u>			
Married	1.8652	.953	1.41
Not Married	2.1613	1.092	

*P < .05.

**P < .01.

Table 26. Independent t-tests of the demographic variable gender with the sixteen factors of the Job Factor Questionnaire.

Factor	M	S.D.	t
<u>Recognition</u>			
Male	.4966	4.173	2.11*
Female	1.8548	4.284	
<u>Achievement</u>			
Male	2.5235	3.592	1.07
Female	3.0806	3.370	
<u>Work Itself</u>			
Male	3.8523	3.392	.23
Female	3.7258	3.685	
<u>Responsibility</u>			
Male	3.3154	3.794	1.27
Female	3.0806	4.078	
<u>Advancement</u>			
Male	.2148	4.135	1.78
Female	.9677	4.498	
<u>Possibility for Growth</u>			
Male	.9866	4.304	1.16
Female	1.7742	4.543	
<u>Supervision</u>			
Male	.9664	4.865	0.76
Female	.4032	4.917	
<u>Personal Life</u>			
Male	2.1409	3.783	1.07
Female	2.7258	3.526	
<u>Status</u>			
Male	2.3087	3.462	2.0*
Female	3.2903	3.159	
<u>Job Security</u>			
Male	2.2685	3.833	.11
Female	2.1935	4.697	

Table 26 (Continued)

Factor	M	S.D.	t
<u>Working Conditions</u>			
Male	1.4899	4.001	1.17
Female	.7419	4.323	
<u>Relationship w/Superiors</u>			
Male	1.946	4.585	1.70
Female	2.4677	5.092	
<u>Relationship w/Co-workers</u>			
Male	3.5034	4.043	1.14
Female	4.2419	4.367	
<u>Relationship w/Subord.</u>			
Male	3.4966	3.622	.23
Female	3.6290	3.846	
<u>University Policy/Administration</u>			
Male	1.2819	4.522	.47
Female	.9516	4.664	
<u>Salary</u>			
Male	.4430	4.408	.48
Female	.8065	5.200	

*P < .05.

In order to answer this question, the differences of each factor of the JFQ between positive contribution and negative contribution were computed. Using the resulting "mean difference" calculation, 16 One-way Analysis of Variance tests were used to determine whether or not any significant differences in the mean scores were evident.

The data in Table 27 revealed that the factors, advancement and salary, both yielded significant F-Ratio ($P < .05$) while the factors, policy and administration, were significant at the $P = .051$ level, and relationships with co-workers were significant at the $P = .06$ level. In examining these factors, it was evident that each factor contributed to increasingly more positive feelings about the job as the age of the respondents increased. The $\bar{x}$ for the contribution of salary towards positive/negative feelings about the job was -2.6667 for the younger group of faculty, while the same computation revealed a $\bar{x}$ of 4.5000 for the oldest group of faculty members. This same trend was evident across all factors, but none other than the ones reported above revealed the threshold of significance. Of these four items, younger faculty members tended to rank advancement, policy and administration, and salary as contributing more to negative feelings about the job.

Research Question #14--When respondents are grouped by type of institution, are there differences in the "mean differences" between the 16 items on the JFQ in their contributions to positive or negative feelings about the job?

Table 27. Analysis of variance of the demographic variable age with sixteen factors of the Job Factor Questionnaire.

Source	D.F.	S.S.	M.S.	F
<u>Recognition</u>				
Between Groups	5	96.1204	19.2241	1.053
Within Groups	207	3779.0545	18.2563	
<u>Achievement</u>				
Between Groups	5	25.6065	5.1213	0.386
Within Groups	207	2747.0351	13.2707	
<u>Work Itself</u>				
Between Groups	5	45.2640	9.0528	0.743
Within Groups	207	2521.2088	12.1798	
<u>Responsibility</u>				
Between Groups	5	57.4567	11.4913	0.732
Within Groups	207	3247.6814	15.6893	
<u>Advancement</u>				
Between Groups	5	300.3796	60.0759	3.476**
Within Groups	207	3577.4905	17.2826	
<u>Possibility for Growth</u>				
Between Groups	5	160.8238	32.1647	1.718
Within Groups	207	3875.2252	18.7209	
<u>Supervision</u>				
Between Groups	5	176.4162	35.2832	1.493
Within Groups	207	4892.0529	23.6331	
<u>Personal Life</u>				
Between Groups	5	69.8456	13.9691	0.999
Within Groups	207	2893.6883	13.9792	
<u>Status</u>				
Between Groups	5	73.3900	14.6780	1.281
Within Groups	207	2372.5494	11.4614	
<u>Job Security</u>				
Between Groups	5	103.4026	20.6805	1.212
Within Groups	207	3532.3892	17.0647	

Table 27 (Continued)

Source	D.F.	S.S.	M.S.	F
<u>Working Conditions</u>				
Between Groups	5	60.2405	12.0481	0.702
Within Groups	207	3554.7369	17.1726	
<u>Relationship w/Superiors</u>				
Between Groups	5	175.2543	35.0509	1.537
Within Groups	207	4719.6373	22.8002	
<u>Relationship w/Co-workers</u>				
Between Groups	5	177.8160	35.5632	2.139
Within Groups	207	3441.2666	16.6245	
<u>Relationship w/Subordinates</u>				
Between Groups	5	36.9179	7.3836	0.541
Within Groups	207	2825.4607	13.6496	
<u>Policy and Administration</u>				
Between Groups	5	226.8169	45.3634	2.238*
Within Groups	207	4196.6571	20.2737	
<u>Salary</u>				
Between Groups	5	267.3368	53.4674	2.536*
Within Groups	207	4363.6977	21.0807	

*p < .05.

**p < .01.

In order to respond to this research question, the differences in each factor's contribution to positive v. negative feelings about the job were computed. Using the resulting "mean difference" calculation, 16 One-way Analysis of Variance tests were employed to determine whether or not any significant differences in the mean scores for varying "types of institutions" were evident.

Analysis of variance revealed significant F-Ratios for each of the following factors: recognition, responsibility, supervision, relationship with superiors, relationship with co-workers, relationship with subordinates, university policy and administration, and salary (see Table 28). Each of the F-Ratios computed for the above factors was significant at $P < .05$. A substantial difference ($P < .10$) was found for the factor, growth ($F = 2.37$, $P = .096$).

Across each variable, faculty at public community colleges rated that variable as contributing to positive feelings about the job at a significantly greater level than did faculty at public universities. Faculty at private universities also rated three of these variables (relationship with superiors, co-workers, and subordinates) as significantly greater contributors to positive feelings about the job than did faculty in public universities. Both faculty in public universities and private universities rated supervision, university policy and administration, and salary as contributing to negative feelings about their jobs.

Research Question #15--When respondents are grouped by whether they are tenured or non-tenured, are there differences in

Table 28. Analysis of variance of type of institution with the sixteen factors of the Job Factor Questionnaire.

Source	D.F.	S.S.	M.S.	F
<u>Recognition</u>				
Between Groups	2	125.6383	62.8191	3.518*
Within Groups	210	3749.5339	17.8549	
<u>Achievement</u>				
Between Groups	2	48.7347	24.3673	1.879
Within Groups	210	2723.9041	12.9710	
<u>Work Itself</u>				
Between Groups	2	44.2034	22.1017	1.840
Within Groups	210	2522.2700	12.0108	
<u>Responsibility</u>				
Between Groups	2	115.1585	57.5792	3.791*
Within Groups	210	3189.9775	15.1904	
<u>Advancement</u>				
Between Groups	2	54.0512	27.0256	1.484
Within Groups	210	3823.8176	18.2086	
<u>Possibility for Growth</u>				
Between Groups	2	89.0345	44.5173	2.369
Within Groups	210	3947.0110	18.7953	
<u>Supervision</u>				
Between Groups	2	169.9105	84.9552	3.642
Within Groups	210	4898.5564	23.3264	
<u>Personal Life</u>				
Between Groups	2	6.9071	3.4535	.0245
Within Groups	210	2956.6218	14.0792	
<u>Status</u>				
Between Groups	2	24.3641	12.1820	1.056
Within Groups	210	2421.5693	11.5313	
<u>Job Security</u>				
Between Groups	2	15.2756	7.6378	0.443
Within Groups	210	3620.5166	17.2406	

Table 28 (Continued)

Source	D.F.	S.S.	M.S.	F
<u>Working Conditions</u>				
Between Groups	2	73.1308	36.5654	2.168
Within Groups	210	3541.8452	16.8659	
<u>Relationship w/Superiors</u>				
Between Groups	2	184.0280	92.0140	4.102*
Within Groups	210	4710.8623	22.4327	
<u>Relationship w/Co-workers</u>				
Between Groups	2	124.6646	62.3323	3.746
Within Groups	210	3494.4160	16.6401	
<u>Relationship w/Subordinates</u>				
Between Groups	2	130.4093	65.2047	5.012*
Within Groups	210	2731.9680	13.0094	
<u>Policy and Administration</u>				
Between Groups	2	382.9498	191.4749	9.952**
Within Groups	210	4040.5234	19.2406	
<u>Salary</u>				
Between Groups	2	271.1617	135.5809	6.530**
Within Groups	210	4359.8701	20.7613	

*P < .05.

**P < .01.

the "mean differences" between the 16 items on the JFQ in their contribution to positive or negative feelings about the job?

In order to respond to this research question, the differences of each factor's contribution to positive feelings about the job v. negative feelings about the job were computed. Using the resulting "mean difference" calculation, 16 two-tailed t-tests were employed to determine whether or not any significant differences in the mean scores were evident.

Data in Table 29 revealed that when respondents were grouped according to whether or not they were tenured, three factors yielded differences in mean responses that were significant ($P < .05$). For the factor, advancement, the mean score for tenured faculty $\bar{x}$ was 1.03 while for non-tenured faculty the $\bar{x}$ response was -1.36 ($P = .000$). The factor, job security, had a mean rating of 3.28 for tenured faculty while non-tenured faculty had a mean of .46 ($P = .000$). For the factor, university policy and administration, tenured faculty had a mean response of -.67 while non-tenured faculty had a $\bar{x}$ response of -2.15 which was significant at the $P < .05$ level. For the factor, advancement and security, tenured faculty rated those two factors as contributing more to positive feelings about the job than did non-tenured faculty. Policy and administration was rated by both groups as contributing to negative feelings about the job, although tenured faculty indicated that there was less of a contribution than non-tenured faculty.

Table 29. Independent t-tests of the demographic variable tenure with the sixteen factors of the Job Factor Questionnaire.

Factor	M	S.D.	t
<u>Recognition</u>			
Tenured	.8148	5.887	0.15
Not Tenured	.9103	4.902	
<u>Achievement</u>			
Tenured	2.6444	3.491	.18
Not Tenured	2.5513	3.847	
<u>Work Itself</u>			
Tenured	3.8815	3.669	.16
Not Tenured	3.8077	3.146	
<u>Responsibility</u>			
Tenured	2.5926	3.664	.53
Not Tenured	2.2821	4.416	
<u>Advancement</u>			
Tenured	1.0296	3.983	3.97**
Not Tenured	1.3590	4.369	
<u>Possibility for Growth</u>			
Tenured	1.5407	4.228	1.40
Not Tenured	.6538	4.561	
<u>Supervision</u>			
Tenured	1.1185	4.663	1.00
Not Tenured	0.3974	5.258	
<u>Personal Life</u>			
Tenured	2.3630	3.901	0.28
Not Tenured	2.2179	3.463	
<u>Status</u>			
Tenured	2.6074	3.503	.10
Not Tenured	2.6538	3.227	
<u>Job Security</u>			
Tenured	3.2815	3.625	4.81**
Not Tenured	.4615	4.386	

Table 29 (Continued)

Factor	M	S.D.	t
<u>Working Conditions</u>			
Tenured	1.1926	4.029	0.62
Not Tenured	1.5641	4.314	
<u>Relationship w/Superiors</u>			
Tenured	1.5481	4.664	.03
Not Tenured	1.5256	5.070	
<u>Relationship w/Co-workers</u>			
Tenured	3.9037	3.896	.83
Not Tenured	3.3974	4.519	
<u>Relationship w/Subordinates</u>			
Tenured	3.4667	3.719	0.51
Not Tenured	3.7308	3.613	
<u>University Policy/Administration</u>			
Tenured	0.6667	4.350	2.25
Not Tenured	2.1538	4.806	
<u>Salary</u>			
Tenured	0.2519	4.677	1.15
Not Tenured	1.0128	4.658	

*P < .05.

**P < .01.

Research Question #16--When respondents are grouped by faculty rank, are there differences in the "mean difference" between the 16 items on the JFQ in their contributions to positive or negative feelings about the job?

In examining this particular research question, the differences in each factor's contribution to positive vs. negative feelings about the job were computed. Using this resulting "mean difference" calculation, 16 One-way Analysis of Variance tests were employed to determine whether or not there were significant differences in the mean scores for varying levels of "faculty rank."

The results of the Analysis of Variance as detailed in Table 30 revealed significant F-Ratios for the factors, advancement ($F = 6.694$, $P = .0002$), job security ($F = 5.610$, $P = .0010$), and relationship with co-workers ($F = 3.222$, $P = .0237$). Substantial differences in the mean ($P < .10$) were found for the factor, growth ($F = 2.231$, $P = .0857$). For all of the factors with mean differences significant at the $P < .05$ level, each factor (advancement, job security, relationship with co-workers) was ranked higher for the higher ranking faculty members, and significantly lower for their lower ranking colleagues. Across all levels of faculty rank for the factor, policy and administration, that particular factor was ranked as contributing to negative feelings about the job. Salary also contributed to negative feelings about the job for all faculty except at the level of full professor.

Table 30. Analysis of variance of demographic variable faculty rank with the sixteen factors of the Job Factor Questionnaire.

Source	D.F.	S.S.	M.S.	F
<u>Recognition</u>				
Between Groups	3	31.4155	10.4718	0.568
Within Groups	205	3780.1255	18.4396	
<u>Achievement</u>				
Between Groups	3	18.2431	6.0810	0.456
Within Groups	205	2732.6904	13.3302	
<u>Work Itself</u>				
Between Groups	3	19.4919	6.4973	0.528
Within Groups	205	2523.5938	12.3102	
<u>Responsibility</u>				
Between Groups	3	64.2831	21.4277	1.378
Within Groups	205	3187.0791	15.5467	
<u>Advancement</u>				
Between Groups	3	344.2704	114.7568	6.694**
Within Groups	205	3514.1816	17.1423	
<u>Possibility for Growth</u>				
Between Groups	3	136.9507	45.6502	2.442
Within Groups	205	3832.8213	18.6967	
<u>Supervision</u>				
Between Groups	3	25.6590	8.5530	0.361
Within Groups	205	4860.7429	23.7109	
<u>Personal Life</u>				
Between Groups	3	37.0219	12.3406	0.870
Within Groups	205	2906.4645	14.1779	
<u>Status</u>				
Between Groups	3	53.9630	17.9877	1.577
Within Groups	205	2338.9120	11.4093	
<u>Job Security</u>				
Between Groups	3	271.4340	90.4780	5.610**
Within Groups	205	3306.1089	16.1273	

Table 30 (Continued)

Source	D.F.	S.S.	M.S.	F
<u>Working Conditions</u>				
Between Groups	3	93.4296	31.1432	1.856
Within Groups	205	3440.6008	16.7834	
<u>Relationship w/Superiors</u>				
Between Groups	3	4.4381	1.4794	0.064
Within Groups	205	4771.7900	23.2770	
<u>Relationship w/Co-workers</u>				
Between Groups	3	161.3555	53.7852	3.222*
Within Groups	205	3421.8237	16.6918	
<u>Relationship w/Subordinates</u>				
Between Groups	3	24.5236	8.1745	0.596
Within Groups	205	2813.5072	13.7244	
<u>Policy and Administration</u>				
Between Groups	3	137.1162	45.7054	2.231
Within Groups	205	4199.4214	20.4850	
<u>Salary</u>				
Between Groups	3	114.6990	38.2330	1.772
Within Groups	205	4423.3196	21.5772	

*P < .05.

**P < .01.

Research Question #17--When respondents are grouped by level of education, are there differences in the "mean difference" between the 16 items on the JFQ in their contribution to positive or negative feelings about the job?

In order to respond to this research question, the differences of each factor's contribution to positive feelings about the job v. negative feelings about the job were computed. Using the resulting "mean difference" calculation, One-way Analysis of Variance tests were employed to determine whether or not any significant differences in the mean scores for varying "levels of education" were evident.

The results of these tests as detailed in Table 31 revealed that only two factors, responsibility and salary, when grouped by level of education, yielded differences significant at the $P < .05$ level ($F = 4.32$, $F = 3.028$).

For the factors, responsibility and salary, faculty with less education tended to rate these factors as contributing more to positive feelings about the job, while faculty with the highest level of education tended to find these factors as contributing significantly less to positive feelings. In the case of salary, Master's degree level faculty ranked that factor as contributing more to negative feelings about the job ($\bar{x} = -1.52$), while those with doctorates ranked it as very neutral ($\bar{x} = 0.00$).

Research Question #18--When respondents are grouped by "length of service," are there differences in the "mean difference" between 16 items on the JFQ in their contributions to positive or negative feelings about the job?

Table 31. Analysis of variance of demographic variable level of education with the sixteen factors of the Job Factor Questionnaire.

Source	D.F.	S.S.	M.S.	F
<u>Recognition</u>				
Between Groups	3	19.4239	6.4746	.0351
Within Groups	208	3838.4433	18.4540	
<u>Achievement</u>				
Between Groups	3	14.5355	4.8452	0.367
Within Groups	208	2746.5591	13.2046	
<u>Work Itself</u>				
Between Groups	3	28.4517	9.4839	0.779
Within Groups	208	2533.3926	12.1798	
<u>Responsibility</u>				
Between Groups	3	193.7435	64.5811	4.320
Within Groups	208	3109.1938	14.9480	
<u>Advancement</u>				
Between Groups	3	25.6215	8.5405	0.462
Within Groups	208	3842.2436	18.4723	
<u>Possibility for Growth</u>				
Between Groups	3	136.0085	45.3362	2.424
Within Groups	208	3889.6457	18.7002	
<u>Supervision</u>				
Between Groups	3	60.5752	20.1917	0.839
Within Groups	208	5006.5728	24.0701	
<u>Personal Life</u>				
Between Groups	3	30.8785	10.2928	0.730
Within Groups	208	2932.1714	14.0970	
<u>Status</u>				
Between Groups	3	3.7198	1.2399	0.106
Within Groups	208	2439.5608	11.7287	
<u>Job Security</u>				
Between Groups	3	25.2057	8.4019	0.485
Within Groups	208	3605.5051	17.3342	

Table 31 (Continued)

Source	D.F.	S.S.	M.S.	F
<u>Working Conditions</u>				
Between Groups	3	16.5756	5.5252	0.320
Within Groups	208	3591.2302	17.2655	
<u>Relationship w/Superiors</u>				
Between Groups	3	25.6016	8.5339	0.494
Within Groups	208	3592.9582	17.2738	
<u>Relationship w/Co-workers</u>				
Between Groups	3	56.2954	18.7651	0.807
Within Groups	208	4838.3010	23.2610	
<u>Relationship w/Subordinates</u>				
Between Groups	3	61.7308	20.5769	1.535
Within Groups	208	2787.8882	13.4033	
<u>Policy and Administration</u>				
Between Groups	3	2.3537	0.7846	0.037
Within Groups	208	4374.8135	21.0327	
<u>Salary</u>				
Between Groups	3	192.0500	64.0166	3.028*
Within Groups	208	4396.9272	21.1391	

*P < .05.

**P < .01.

In order to respond to this research question, the differences of each factor's contribution to positive feelings about the job v. negative feelings about the job were computed. Using the resulting "mean difference" calculation, 16 One-way Analysis of Variance tests were utilized to determine whether or not any significant differences in the mean scores for varying "lengths of service" were evident.

Three factors--advancement, job security, and university policy and administration--had means that were significantly different at the $P < .05$ level (Table 32). The F-Ratio for advancement, when respondents were grouped by years of service, was 3.178 ($P = .0087$). The F-Ratio for the factor, security, was 6.267 ($P = .000$) and for university policy and administration $F = 2.845$ ($P = .0166$). For each of these variables, there appeared to be a significantly higher mean contribution to positive feelings about the job for faculty members with the longest length of service. Faculty members with the least length of service tended to rate these factors as contributing less to positive feelings about the job, and for faculty members with less than 15 years' experience, the factor, university policy and administration, contributed more to negative feelings about the job.

Research Question #19--When respondents are grouped by whether they are married or not married, are there differences in the "mean differences" between the 16 items on the JFQ in their contribution to positive or negative feelings about the job?

Table 32. Analysis of variance of demographic variables length of service with the sixteen factors of the Job Factor Questionnaire.

Source	D.F.	S.S.	M.S.	F
<u>Recognition</u>				
Between Groups	5	62.1115	12.4223	0.674
Within Groups	207	3813.0675	18.4206	
<u>Achievement</u>				
Between Groups	5	67.9149	13.5830	1.040
Within Groups	207	2704.7321	13.0663	
<u>Work Itself</u>				
Between Groups	5	45.5458	9.1092	0.748
Within Groups	207	2520.9317	12.1784	
<u>Responsibility</u>				
Between Groups	5	71.6227	14.3245	0.917
Within Groups	207	3233.5195	15.6209	
<u>Advancement</u>				
Between Groups	5	276.4263	55.2852	3.178**
Within Groups	207	3601.4475	17.3983	
<u>Possibility for Growth</u>				
Between Groups	5	92.9132	18.5826	0.976
Within Groups	207	3943.1382	19.0490	
<u>Supervision</u>				
Between Groups	5	51.7985	10.3597	0.427
Within Groups	207	5016.6733	24.2351	
<u>Personal Life</u>				
Between Groups	5	117.2150	23.4430	1.705
Within Groups	207	2846.3208	13.7503	
<u>Status</u>				
Between Groups	5	54.1363	10.8273	0.937
Within Groups	207	2391.8055	11.5546	
<u>Job Security</u>				
Between Groups	5	478.0436	95.6087	6.267**
Within Groups	207	3157.7532	15.2548	

Table 32 (Continued)

Source	D.F.	S.S.	M.S.	F
<u>Working Conditions</u>				
Between Groups	5	44.4308	8.8862	0.515
Within Groups	207	3570.5510	17.2490	
<u>Relationship w/Superiors</u>				
Between Groups	5	23.5173	4.7035	0.271
Within Groups	207	3595.5684	17.3699	
<u>Relationship w/Co-workers</u>				
Between Groups	5	68.1459	13.6292	0.585
Within Groups	207	4826.7502	23.3176	
<u>Relationship w/Subordinates</u>				
Between Groups	5	58.5537	11.7107	0.865
Within Groups	207	2803.8307	13.5451	
<u>Policy and Administration</u>				
Between Groups	5	284.4097	56.8819	2.845*
Within Groups	207	4139.0693	19.9955	
<u>Salary</u>				
Between Groups	5	70.7041	14.1408	0.642
Within Groups	207	4560.3319	22.0306	

*P < .05.

**P < .01.

In order to respond to this research question, the differences of each factor's contribution to positive feelings about the job v. negative feelings about the job were computed. Using the resulting "mean difference" calculation, 16 two-tailed t-tests were employed to determine whether or not any significant differences in the mean scores were evident.

The data detailed in Table 33 revealed that only the scores of two-factors--personal life, and policy and administration--had mean differences at the $P < .05$ level. Married faculty had a mean of 2.65 for "personal life," while their unmarried colleagues rated that factor at .31 ($P < .001$). For the factor, policy and administration, the $\bar{x}$ response for unmarried faculty was -2.871, while the mean response for married faculty was -.93 ($P = .035$). Married faculty appeared to see "personal life" as having more of a contribution to positive feelings about the job than did unmarried faculty. University policy and administration was rated as contributing to negative feelings about the job for both married and unmarried faculty. However, that particular factor contributed more to negative feelings for unmarried faculty than for married faculty.

Research Question #20--Are the job factors that lead to positive feelings about the job different from those leading to negative feelings about the job?

One of the central components of the "dual factor" theory of Frederick Herzberg is that factors that are motivators will lead to positive feelings about the job but will not be as significant as hygiene factors in contributing to negative feelings about the job.

Table 33. Independent t-tests of the demographic variable marital status with the sixteen factors of the Job Factor Questionnaire.

Factor	M	S.D.	t
<u>Recognition</u>			
Married	0.8444	4.225	0.11
Not Married	0.9375	4.669	
<u>Achievement</u>			
Married	2.5056	3.621	0.98
Not Married	3.1875	3.649	
<u>Work Itself</u>			
Married	3.8778	3.439	0.00
Not Married	3.8750	4.705	
<u>Responsibility</u>			
Married	2.4444	3.911	0.60
Not Married	2.9063	4.035	
<u>Advancement</u>			
Married	.1778	4.199	.16
Not Married	.0313	4.823	
<u>Possibility for Growth</u>			
Married	1.2167	4.311	0.21
Not Married	1.4063	4.648	
<u>Supervision</u>			
Married	0.6056	4.855	1.84
Not Married	2.3438	4.949	
<u>Personal Life</u>			
Married	2.6500	3.632	3.23**
Not Married	.3125	3.797	
<u>Status</u>			
Married	2.7389	3.253	1.04
Not Married	1.9375	4.142	
<u>Job Security</u>			
Married	2.4611	3.989	1.70
Not Married	.9375	4.785	

Table 33 (Continued)

Factor	M	S.D.	t
<u>Working Conditions</u>			
Married	1.5111	4.001	1.05
Not Married	.6250	4.478	
<u>Relationship w/Superiors</u>			
Married	1.5889	4.786	0.52
Not Married	1.0938	4.947	
<u>Relationship w/Co-workers</u>			
Married	3.8667	3.812	1.02
Not Married	2.8125	5.631	
<u>Relationship w/Subordinates</u>			
Married	3.7556	3.526	1.21
Not Married	2.8750	3.842	
<u>University Policy/Administration</u>			
Married	0.9333	4.562	2.17*
Not Married	2.7813	4.419	
<u>Salary</u>			
Married	0.4111	4.613	1.06
Not Married	1.4063	4.924	

*P < .05.

**P < .01.

In previous studies the 16 items on the JFQ that received responses contributing to positive feelings about the job were compared to the corresponding mean score of the same 16 factors when they were ranked in their contribution to negative feelings about the job. The means of the "positive score" for the factor was compared to the mean of the "negative score" utilizing paired t-tests. When significant differences were found between these means, it was concluded by both Darrow (1971) and Lahari and Srivasta (1967) that these factors were not operating on a bi-polar continuum, but rather on a dual-factor continuum.

In utilizing the same method of analysis for this study, the results of the paired t-tests revealed significant differences in the means for 15 of the 16 factors. The only factor where mean difference between contribution to positive feelings about the job and negative feelings about the job was not significant was the factor, advancement ($t = .53$). The t-value for the factor salary was -1.67 which was significant at the $P < .10$ level. The factors--recognition, achievement, work itself, responsibility, possibility for growth, personal life, status, job security, working conditions, relationships with superiors, relationship with co-workers, and relationship with subordinates--all contributed significantly more to positive feelings about the job than to negative feelings about the job. The factors--supervision, university policy and administration--contributed significantly more to negative feelings about the job for all faculty members. To conclude that the factors

are operating on a bipolar continuum solely on the basis of the paired t-tests is erroneous. The means for motivator scores appear to be, as a group, higher than the hygiene scores, so a difference in means of the positive contribution to the job and the negative contribution to the job has very little to do with the fact that these factors operate on a dual continuum if the motivator scores are generally higher than the hygiene scores.

In order to examine this research question, the means of the motivators and hygiene factors contributing to positive feelings about the job as well as the means for the motivators and hygiene factors for negative feelings about the job were computed. Once again paired t-tests were utilized to examine the difference between motivators and hygiene scores for both sets of factors (Table 34). In both cases the motivators were clearly higher than the hygiene factors in relating to both positive and negative feelings about the job ($t = 9.16$, $P = 0.0$, and $t = 8.57$, $P = 0.0$, respectively). The mean score for motivators was 7.43 for positive feelings about the job and 5.43 for negative feelings about the job. The mean score for hygiene factors was 6.31 for positive feelings about the job and 4.85 for negative feelings about the job. The results of this test would tend to support the idea that when grouped, the motivators and hygiene factors are not operating on a dual-continuum. The motivator factors as a group are clearly more closely linked to positive feelings about the job, yet they also appear to be more closely linked to negative feelings about the job.

Table 34. Paired t-tests of mean averages of motivator and hygiene factor when items were rated by respondents as relating to positive and negative feelings about the job.

Factor	M	S.D.	t
<u>Positive Feelings</u>			
Motivators	7.4306	1.809	9.16*
Hygiene	6.3104	1.627	
<u>Negative Feelings</u>			
Motivators	5.4129	2.187	4.88*
Hygiene	4.8519	1.762	

*P < .01.

CHAPTER IV

SUMMARY, FINDINGS, DISCUSSION, AND RECOMMENDATIONS

Introduction

The initial section of this chapter presents a detailed summary of this study. Following the summary, the findings of the study and a discussion of those findings are presented. The final section is a recommendation for further research based on the findings of this study.

Summary of the Study

Statement of the Problem

Faculty members in institutions of higher education are a group that has been largely ignored in the large body of research from the study of organizational management. Theories that have long been applied to non-educational settings have benefited greatly from research in the area of organizational psychology and management, and there is ample reason to move in the direction of looking at the transferability of this knowledge to institutions of higher education (Besse, 1973; Millet, 1975).

There are ample arguments citing the uniqueness of the "faculty" position in higher education, and there can be no doubt that the organizational complexities of institutions of higher education and resulting challenges to its management point to the need to greater sensitivity and understanding of faculty.

Purpose of the Study

The purpose of this study was to apply some of the current theoretical work in organizational psychology to faculty members in higher education specifically examining intent to remain, as a prediction of turnover; organizational commitment, as a measure of attachment to the organization; and facet satisfaction, as an indicator of sources of "feeling" about the job (both positive and negative). Several demographic variables used in conjunction with these constructs included gender, age, level of education, type of institution (private, public, community college), faculty rank, tenure, marital status, and length of service. This study also investigated the applicability of dual-factor theory to faculty members. Although this theory has been largely dismissed in non-educational settings, there has been enough significant support for its application in educational settings to warrant further investigation.

Methodology

In order to collect appropriate information, a stratified sample was drawn from faculty members in various state institutions with the three primary subpopulations being faculty in public universities, public community colleges, and private colleges and universities. The group surveyed from each of these subpopulations was equal to its relative percentage in the total population sampled. Due to conditions beyond the control of this research,

public universities consisted only of "Board of Regents" institutions and not The University of Tennessee system.

The 300 subjects selected for this study were mailed a questionnaire consisting of several major parts (Appendix E). The first section of this survey requested information categorized as demographic data including age, gender, type of institution, tenure vs. non-tenure, faculty rank, level of education, length of service, and marital status. This section also contained a question designed to measure "intent to remain" and expressed level of "job satisfaction." Sections two and three of the questionnaire consisted of two unpublished instruments: the Organizational Commitment Questionnaire, designed to measure organizational commitment, and the Job Factor Questionnaire, designed to examine Herzberg's dual-factor theory.

Data were treated through the use of the Statistical Package for the Social Sciences (Nie, Norman, and Halletal, 1970) utilizing the approximate parametric statistical procedures. These procedures included One-way Analysis of Variance, paired and independent t-tests, and Pearson Product Moment Correlation coefficients. A posteriori analysis of One-way Analysis of Variance results were made through the use of the Scheffe test.

Research Questions

A set of 20 research questions was utilized to address the purpose set forth in this study. The "primary" research questions

dealt with the relation of "intent to remain" with other variables utilized in the study. Intent to remain was treated as the "dependent variable" in research questions 1-5. For research questions 6-9, the variable organizational commitment as measured by the Organizational Commitment Questionnaire was rotated into the position of the dependent variable. Expressed satisfaction was also a variable that was treated as "dependent" and was examined in research questions 10-11. Research questions 12-19 examined the mean difference in the 16 parts of the Job Factor Questionnaire in their contribution to positive or negative feelings about the job, in relation to each of the demographic variables utilized in this study. The final research question examined the plausibility of the Herzberg's assertion that satisfaction/dissatisfaction operates on a "dual continuum" as opposed to a "bipolar" continuum, and whether there was a difference in motivator and hygiene factors in their contribution to satisfaction and dissatisfaction.

The set of 20 research questions used in this study include:

Research Question #1--Does a faculty member's degree of "intent to remain" with an organization vary depending on whether that faculty member teaches at a public university, public community college, or at a private college or university?

Research Question #2--Does a faculty member's "intent to remain" vary depending on his/her level of organizational commitment as measured by the Organizational Commitment Questionnaire?

Research Question #3--Does a faculty member's expressed level of "intent to remain" vary depending on his/her expressed level of job satisfaction?

Research Question #4--Does a faculty member's expressed level of "intent to remain" vary when examined with the demographic variables: age, gender, highest level of education, faculty rank, tenure, marital status, and length of service?

Research Question #5--Are there differences in the "mean difference" between the 16 items on the JFQ in their contribution to positive or negative feelings about the job when examined by expressed level of "intent to remain?"

Research Question #6--Does a faculty member's level of organizational commitment vary depending on whether that faculty member teaches at a public university, a public community college, or at a private college or university?

Research Question #7--Does a faculty member's level of "organizational commitment" vary depending on his/her expressed level of job satisfaction?

Research Question #8--When the "organizational commitment" variable is treated as the dependent variable, and is grouped by the demographic variables (age, gender, highest level of education, faculty rank, tenure, marital status, and length of service), is there a significant difference in the level of organizational commitment expressed within each of these variables?

Research Question #9--When "organizational commitment" is examined in terms of the 16 factors of the JFQ as they relate to positive or negative feelings about the job, is there a significant difference of the "mean difference" value of these 16 factors and scores on the Organizational Commitment Questionnaire?

Research Question #10--Does a faculty member's expressed level of job satisfaction vary depending on whether that faculty member teaches at a public university, a public community college, or at a private college or university?

Research Question #11--Does a faculty member's expressed level of job satisfaction vary when the faculty members are grouped by the demographic variables: age, gender, highest level of education, faculty, rank, tenure, marital status, and length of service?

Research Question #12--When respondents are grouped by gender, are there differences in the "mean difference" between the 16 items on the JFQ in their contribution to positive or negative feelings about the job?

Research Question #13--When respondents are grouped by age, are there differences in the "mean difference" between the 16 items on the JFQ in their contribution to positive or negative feelings about the job?

Research Question #14--When respondents are grouped by type of institution, are there differences in the "mean differences" between the 16 items on the JFQ in their contributions to positive or negative feelings about the job?

Research Question #15--When respondents are grouped by whether they are tenured or non-tenured, are there differences in the "mean difference" between the 16 items on the JFQ in their contribution to positive or negative feelings about the job?

Research Question #16--When respondents are grouped by faculty rank, are there differences in the "mean difference" between the 16 items on the JFQ in their contributions to positive or negative feelings about the job?

Research Question #17--When respondents are grouped by level of education, are there differences in the "mean difference" between the 16 items on the JFQ in their contributions to positive or negative feelings about the job?

Research Question #18--When respondents are grouped by "length of service," are there differences in the "mean difference" between the 16 items on the JFQ in their contributions to positive or negative feelings about the job?

Research Question #19--When respondents are grouped by whether they are married or not married, are there differences in the "mean difference" between the 16 items on the JFQ in their contributions to positive or negative feelings about the job?

Research Question #20--Are the job factors, as measured by the JFQ, that lead to positive feelings about the job different from those leading to negative feelings about the job?

Findings

A summary of the results of the statistical analysis of those research questions presented in this study is outlined below (significant difference defined as $P < .05$ unless otherwise noted).

Research Question #1--When respondents were grouped by type of institution (community college, private university and public university), the difference in each group's expressed "intent to remain" did not vary significantly.

Research Question #2--When respondents were grouped according to their level of "Organizational Commitment" as measured on the Organizational Commitment Questionnaire, the differences in expressed "intent to remain" were significant. Those faculty members with high levels of organizational commitment had a significantly higher expressed intent to remain than those with low organizational commitment scores.

Research Question #3--When respondents were grouped according to expressed level of satisfaction, there was a significant difference in their level of "intent to remain" with the university. Those faculty members with higher expressed levels of job satisfaction were significantly more inclined to remain than those who were less satisfied.

Research Question #4--Differences within selected demographic variables when examined in terms of "intent to remain" revealed that only the variable tenure v. non-tenure resulted in a significant

difference. Tenured faculty had a significantly higher level of intent to remain than did non-tenured faculty. There were no significant differences for intent to remain when respondents were grouped by age, gender, level of education, faculty rank, marital status, or length of service.

Research Question #5--When the "mean difference" score from the 16 factors on the JFQ was examined in terms of "intent to remain," the factors--recognition, advancement, and growth in the job--contributed to positive feelings about the job for faculty with high intent to remain. Those same factors contributed significantly more to dissatisfaction for those with lower levels of intent to remain. The factor, job security, was significantly higher at each end of the "intent to remain" scale than for the middle range.

Research Question #6--When respondents were grouped by "type of institution," the difference in the expressed level of organizational commitment varied significantly among the types of institutions represented. Faculty members at public universities appeared to be significantly less committed to their organization than faculty at community colleges.

Research Question #7--When the level of organizational commitment of the respondents was examined with expressed level of job satisfaction, it was evident that faculty with high levels of organizational commitment had a significantly higher level of job satisfaction than did those with low levels of organizational commitment.

Research Question #8--Differences within selected demographic variables when examined against the variable "organizational commitment" revealed that women seemed to be more committed to their organization than their male counterparts.

Research Question #9--Of the 16 JFQ factors utilized in this study, all factors, with the exception of personal life and relation to subordinates, were rated as contributing more significantly to positive feelings about the job for faculty with high organizational commitment scores as opposed to those with low organizational commitment scores.

Research Question #10--When respondents were grouped by "type of institution," their expressed level of job satisfaction was significantly higher for faculty members at private institutions as opposed to faculty at public universities.

Research Question #11--Differences within demographic variables when examined against the variable "expressed satisfaction" did not reveal differences that were significant.

Research Question #12--For the demographic variable gender, only one variable--recognition--revealed "significant differences in the "mean difference" scores of the 16 factors on the JFQ. Women ranked recognition as contributing more to positive feelings than did men.

Research Question #13--When examining the "mean difference" of the 16 JFQ items against the demographic variable, age, it was evident that senior faculty members rated the factors--advancement,

salary, and policy and administration--as contributing more positively to their jobs than did their junior colleagues.

Research Question #14--When the "mean difference" of the 16 JFQ items was examined against type of institution, public community colleges rated the factors--recognition, responsibility, supervision, relationships with superiors, co-workers, subordinates, university policy and administration and salary--as contributing significantly more to positive feelings about the job than did faculty in private universities or public universities.

Research Question #15--When the "mean difference" of the 16 JFQ items was examined against the demographic variable, tenure v. non-tenure, the factors--advancement, job security, and policy and administration--were rated as contributing more to positive feelings about the job for tenured faculty.

Research Question #16--When the "mean difference" of the 16 JFQ items was examined against the faculty rank of the respondents, the factors--advancement, job security, relationship with co-workers--were ranked as contributing significantly more to positive feelings about the job for higher ranking faculty.

Research Question #17--For the examination of the demographic variable, level of education, with the "mean difference" of the 16 JFQ items, only two factors, responsibility and salary, were rated significantly higher by faculty members with less education than by those with doctorates.

Research Question #18--When the "mean difference" of the 16 JFQ items was examined against the variable, "length of service," three factors--advancement, job security, and university policy and administration--were ranked as contributing significantly more to positive feelings about the job for faculty members with the longer length of service.

Research Question #19--When the "mean difference" of the 16 JFQ items was examined against the variable, marital status, two factors--personal life and policy and administration--were ranked as contributing significantly more to positive feelings about the job for married faculty members.

Research Question #20--When the mean score for the motivators was compared with the mean score for the hygiene factors for both the group of factors leading to positive feelings about the job and the group of factors leading to negative feelings about the job, it was clear that the motivators were more, on the average, closely linked to positive feelings about the job and negative feelings about the job, and therefore, the relationship may be bi-polar and not on a dual-continuum. The results did show that, for positive feelings about the job, the motivators were clearly distinguished from the hygiene factors, which would generally be supportive of Herzberg's Theory.

Discussion

In general, the study generated some interesting and useful data on the nature of job attitudes for faculty members teaching at

institutions of higher education in the state of Tennessee. It can be best summarized by drawing the conclusion that colleges and universities in the state of Tennessee can continue to expect very low levels of turnover in their faculty positions as evidenced in high levels of expressed "intent to remain" across the three types of institutions studied. This expectation of low turnover can also be explained by the relatively high level of attachment that faculty have to their organizations as expressed in their responses to the Organizational Commitment Questionnaire. Generalizing the findings of Hom, Katerberg, and Hulin (1979), this high level of organizational commitment would be an additional indication that there will be a low level of turnover for these faculty members.

In general:

1. Faculty less inclined to stay at an institution of higher education would be faculty who taught at a public state university, who expressed a low level of organizational commitment as measured by the Organizational Commitment Scale, who expressed a low level of job satisfaction, and who were non-tenured.

Factors on the job that led to dissatisfaction for those who were less inclined to stay included lack of recognition, lack of opportunity for advancement, and lack of opportunity for growth on the job.

2. Those faculty who expressed a lower level of organizational commitment, as measured on the OCQ, appeared to be faculty who taught at public universities, who expressed a low level of job satisfaction, and who were male. Factors on the job that led to dissatisfaction

for those with low levels of organizational commitment included all factors other than personal life and relationship with subordinate.

3. The "level of expressed satisfaction" item revealed a high level of satisfaction for the entire sample. Those faculty who expressed a lower level of overall job satisfaction appeared to be faculty who taught at four year public universities and who were male.

Although the index of organizational commitment was very high for all faculty members, a finding of this study was that faculty in public universities expressed a significantly lower level of attachment to their institutions than did faculty at public community colleges.

Organizational Commitment Questionnaire, scores for faculty in community colleges fell between the 74th and 77th percentile, while scores for faculty at public universities fell between the 44th and 49th percentile. This result, coupled with the lower level of "intent to remain" for faculty members at public universities, would suggest that faculty at public universities are more likely to turnover than their counterparts at community colleges. The actual rate of turnover at public universities, therefore, may be somewhat deflated due to the fact that it is generally agreed that there is a poor job market within higher education, and therefore, not many opportunities are available for faculty who wish to leave. Although the factor, outside opportunity, was not specifically addressed in this study, the impact of that variable might be considered

negligible when another factor, satisfaction, is taken into consideration. Martin (1978) and Dreher and Dougherty (1980) found that the variable outside opportunity, impacted the variable, intent to remain, when levels of job satisfaction were reported as being low. In other words, had faculty in this study generally expressed a low level of job satisfaction (and organizational commitment), yet still expressed a high level of intent to remain with the organization, the factor, outside opportunity, would have to be considered as a significant intervening variable.

An examination of the data generated for public colleges through the Job Factor Questionnaire reveals that the low commitment scores (and strongly related expression of satisfaction) could be explained by the fact that faculty members at public universities reported a stronger feeling of dissatisfaction than their private university counterparts in the job factors--achievement, responsibility, supervision, relationships with superiors, relationship with co-workers, policy and administration, and salary. In other words, faculty at public universities appear to be far less satisfied with university governance and other environmental factors than their private university counterparts. This could reflect the premise that, in general, private universities are far less bureaucratized and regulated than public institutions and consequently have more input and effect on campus governance. This is generally supportive of the findings of Cares and Blackburn (1976, pp. 134-135) who state that:

The central idea, which the present study supports, is that faculty do not want to be managed or controlled. . . . Since the importance of perceived control of the environment and the democratic nature of the department fall within the administrative domain and are capable of alteration, it seems possible that increased satisfaction and success can be generated by the employment of democratic management principles.

Another interesting result concerned the difference in the scores of men and women on the Organizational Commitment Questionnaire and on the expressed satisfaction scale. On each of these measures, women were significantly "more attached" and "more satisfied" than the male respondents. This might be attributable to the fact that women in faculty positions in Tennessee are pleased with the gains that they have made in spite of the fact that far fewer women were tenured than men.

A result that is not surprising is that tenured faculty had a significantly higher level of "intent to remain" than non-tenured faculty, as well as a significantly higher score on the Organizational Commitment Questionnaire. A possible explanation for this would be that tenuring a faculty member has the added impact of tightening the bond between the faculty member and the university. In the monograph Tenure (1979) one of the major criticisms of tenure is that it tends to "stifle" productivity. Higher scores on the OCQ would lead one to question this assumption due to the fact that high OCQ scores have been consistently linked to high productivity (Porter, Steers, and Lawler, 1979).

The analysis of the JFQ scores for tenured v. non-tenured faculty revealed that the factor, job security, was more

significantly related to positive feelings about the job for tenured faculty as opposed to non-tenured faculty. Mayhew (1979) in Surviving the Eighties proposes a solution to the problem of our "over tenured" college and universities which might raise some concern among non-tenured faculty in regard to job security.

According to Mayhew (1979, pp. 252-253):

For all institutions, except perhaps 100 research and graduate training institutions, and in spite of the damage it may do to some young scholars, the policy of terminating non-tenured faculty before tenured faculty should be followed.

The results of this study suggest that more attention should be paid to non-tenured faculty and that efforts aimed at increasing their level of organizational commitment and overall job satisfaction could be channeled through faculty development programs.

In utilizing the data from the Job Factor Questionnaire to examine the applicability dual-factor theory to faculty, it is evident that the data collected in this study lend more support to a single continuum model to explain satisfaction. There is little support for Herzberg's notion that a dual continuum explains the relationship between motivators and hygiene factors and their impact on feelings about the job. Motivators appeared to make a contribution to negative feelings about the job as well as a contribution to positive feelings about the job. Although overall motivators did rank higher than hygiene factors in contributing to positive feelings about the job, there were some exceptions that would not have been predicted in Herzberg's model.

Relationship with co-workers (a hygiene factor) ranked higher than responsibility recognition and growth (motivators) in contributing to positive feelings about the job. Relationships with subordinates and superiors (also hygiene factors) ranked higher than growth in relating to positive feelings about the job. For those factors that led to negative feelings about the job, only three hygiene factors--supervision, university policy and administration, and salary--were ranked in the top six factors. Advancement, possibility for growth and advancement (motivators) were all ranked ahead of other hygiene factors in relating to negative feelings about the job.

Administrators in time of economic strain and fiscal cutbacks express justifiable concern about faculty morale, a somewhat nebulous term. Administrators should use caution in interpreting dissatisfaction with the environmental factors (policy and administration, salary) as causing overall morale problems that might logically lead to low productivity or even turnover. Based on the data compiled in this study, dissatisfaction with environmental factors does not necessarily relate "bad feelings" about the job; in fact, it is apparent that faculty are likely to be more attached to the job as evidenced in the OCQ scores and high "intent to remain" scores. According to Monday, Steers, and Porter (1979), high scores on the OCQ relate strongly to high productivity and reduced turnover.

It is apparent from this study that in spite of some of the significant challenges facing higher education in the state of

Tennessee, faculty members across the three types of institutions are highly satisfied, have a high degree of "attachment" to their institutions, and have a strong desire to remain on the job. Public institutions, by their nature, have faculty who rank lower across the intent to remain and organizational commitment scales than those in private universities. It is apparent that this situation should be addressed by administrators through addressing factors that "they can do something about" and coming to terms with the fact that certain environmental factors will have a negligible impact on attitudes of any consequence. Cares and Blackburn (1980, p. 123) feel that:

As critical as the problem of faculty development is, little empirical data exist. Yet it is important to determine what personal and environmental factors are related to a professor's satisfying and successful career.

Recommendation

To better assess the predictive value of the "intent to remain" item and to further investigate the validity of other key variables in relation to "intent," it would be beneficial to replicate this particular study with the same subjects. A replicate study would also allow for an investigation of the impact of the "changing job environment" since in the views of many, there is growing dissatisfaction with certain environmental characteristics such as salary.

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APPENDIXES

APPENDIX A

STATISTICAL PACKAGE FOR THE SOCIAL SCIENCE PROGRAM

RUN NAME	FACTORS AFFECTING FACULTY TURNOVER
VARIABLE LIST	X01 TO X58
INPUT MEDIUM	CARD
N OF CASES	UNKNOWN
VAP LABELS	X01,AGE/ X02,SEX/ X03,LEVEL OF EDUCATION/ X04,TYPE OF INSTITUTION/ X05,FACULTY RANK/ X06,TENURE/ X07,ACADEMIC ADMINISTRATION/ X08,SATISFACTION/ X09,MARITAL STATUS/ X10,LENGTH OF SERVICE/ X11,INTENT TO REMAIN/ X12 TO X26,ORGANIZATIONAL COMMITMENT/ X27,RECOGNITION POSITIVE/ X28,ACHIEVEMENT POSITIVE/ X29,WORK ITSELF POSITIVE/ X30,RESPONSIBILITY POSITIVE/ X31,ADVANCEMENT POSITIVE/ X32,POSSIBILITY FOR GROWTH POSITIVE/ X33,SUPERVISION POSITIVE/ X34,PERSONAL LIFE POSITIVE/ X35,STATUS POSITIVE/ X36,JOB SECURITY POSITIVE/ X37,WORKING CONDITIONS POSITIVE/ X38,RELATIONSHIP WITH SUPERIORS POSITIVE/ X39,RELATIONSHIP WITH COWORKERS POSITIVE/ X40,RELATIONSHIP TO SUBORDINATES POSITIVE/ X41,UNIVERSITY POLICY AND ADMINISTRATION POSITIVE/ X42,SALARY POSITIVE/ X43,RECOGNITION NEGATIVE/ X44,ACHIEVEMENT NEGATIVE/ X45,WORK ITSELF NEGATIVE/ X46,RESPONSIBILITY NEGATIVE/ X47,ADVANCEMENT NEGATIVE/ X48,GROWTH NEGATIVE/ X49,SUPERVISION NEGATIVE/ X50,PERSONAL LIFE NEGATIVE/ X51,STATUS NEGATIVE/

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X52,JOB SECURITY  NEGATIVE/
X53,WORKING CONDITIONS  NEGATIVE/
X54,RELATIONSHIP WITH SUPERIORS  NEGATIVE/
X55,RELATIONSHIP WITH COWORKERS  NEGATIVE/
X56,RELATIONSHIP WITH SUBORDINATES  NEGATIVE/
X57,UNIVERSITY POLICY AND ADMINISTRATION  NEGATIVE/
X58,SALARY  NEGATIVE/
VALUE LABELS  X01 (1) LESS THAN 25 YEARS OF AGE (2) 25 YEARS BUT
LESS THAN 30 YEARS (3) 30 YEARS BUT LESS THAN 40
YEARS (4) 40 YEARS BUT LESS THAN 50 YEARS (5) 50
YEARS BUT LESS THAN 65 YEARS (6) 65 OR OLDER
X02 (1) MALE (2) FEMALE/
X03 (1) TWO YEARS COLLEGE (2) ASSOC DEGREE (3)
BACHELORS (4) MASTERS (5) DOCTORATE/
X04 (1) PUBLIC COMMUNITY COLLEGE (2) PRIVATE
INSTITUTION (3) PUBLIC UNIVERSITY/
X05 (1) PROFESSOR (2) ASSOC PROFESSOR (3) ASSIS
PROFESSOR (4) INSTRUCTOR/
X06 (1) YES (2) NO/
X07 (1) YES (2) NO/
X08 (1) VERY SATISFIED (2) SOMEWHAT SATISFIED (3)
NOT SURE (4) SOMEWHAT DISSATISFIED (5) VERY
DISSATISFIED/
X09 (1) YES (2) NO/
X10 (1) LESS THAN 2 YEARS (2) 2 YEARS BUT LESS THAN
5 (3) 5 YEARS BUT LESS THAN 10 (4) 10 YEARS BUT
LESS THAN 15 (5) 15 YEARS BUT LESS THAN 20 (6) 20
YEARS AND OVER/
X11 (1) STRONGLY AGREE (2) AGREE (3) DONT AGREE OR
DISAGREE (4) DISAGREE (5) STRONGLY DISAGREE/
X12 TO X26 (1) STRONGLY DISAGREE (2) MODERATELY
DISAGREE (3) SLIGHTLY DISAGREE (4) NEITHER
DISAGREE OR AGREE (5) SLIGHTLY AGREE (6) MODERATELY
AGREE (7) STRONGLY AGREE/
X27 TO X58 ('A') NO CONTRIBUTION ('J') MAXIMUM
CONTRIBUTION/
INPUT FORMAT  FIXED(26F1.0,32A1)
PAGESIZE      55
RECODE        X27 TO X58 ('A'=1)('B'=2)('C'=3)('D'=4)('E'=5)
('F'=6)('G'=7)('H'=8)('I'=9)('J'=10)(ELSE=0)

                CREATION OF NEW VARIABLES

COUNT        MIXVAR=X27 TO X58 (0)
MISSING VALUES X01 TO X58 (0)
COMPUTE        POSMOT=(X27+X28+X29+X30+X31)/(5-MISVAR)
COMPUTE        POSHYG=(X32+X33+X34+X35+X36+X37+X38+X39+X40+X41+X42)/
                (11-MISVAR)

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COMPUTE      NEGMOT=(X43+X44+X45+X46+X47)/(5-MISVAR)
COMPUTE      NEGHYG=(X48+X49+X50+X51+X52+X53+X54+X55+X56+X57+X58)/
              (11-MISVAR)
COMPUTE      F1=X27-X43
COMPUTE      F2=X28-X44
COMPUTE      F3=X29-X45
COMPUTE      F4=X30-X46
COMPUTE      F5=X31-X47
COMPUTE      F6=X32-X48
COMPUTE      F7=X33-X49
COMPUTE      F8=X34-X50
COMPUTE      F9=X35-X51
COMPUTE      F10=X36-X52
COMPUTE      F11=X37-X53
COMPUTE      F12=X38-X54
COMPUTE      F13=X39-X55
COMPUTE      F14=X40-X56
COMPUTE      F15=X41-X57
COMPUTE      F16=X42-X58
RECODE       X14,X18,X20,X22,X23,X26 (1=7)(2=6)(3=5)(4=4)(5=3)
              (6=2)(7=1)
COUNT       MISVAR=X12 TO X26 (0)
COMPUTE      ORGCOM=(X12+X13+X14+X15+X16+X17+X18+X19+X20+X21+X22+
              X23+X24+X25+X26)/(15-MISVAR)
IF           (MISVAR GE 1) ORGCOM=0
ASSIGN MISSING ORGCOM (0)
IF           (ORGCOM GE 0.01 AND LE 1.01) ORGCOM=1
IF           (ORGCOM GE 1.02 AND LE 2.01) ORGCOM=2
IF           (ORGCOM GE 2.02 AND LE 3.01) ORGCOM=3
IF           (ORGCOM GE 3.02 AND LE 4.01) ORGCOM=4
IF           (ORGCOM GE 4.02 AND LE 5.01) ORGCOM=5
IF           (ORGCOM GE 5.02 AND LE 6.01) ORGCOM=6
IF           (ORGCOM GE 6.02) ORGCOM=7

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SAMPLE DATA INPUT

```

READ INPUT DATA
3141 211121761277562727761IJJJDIICHHGIHHFFDFDIGIABEADFED
21434222225255313715577313GJIJGCCCFAAHHIADJAAGHGJGCI AJJAJG
32434121141771467461711771HHHGHHHAHAIIIFGAAAAAAAAAAAAAAAAA
41522221121772377364623751GFIGGFIHEAIIHHGCBDBCCAFDAABACCG
END INPUT DATA

```

CORRELATED T-TESTS

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T-TEST      PAIRS=POSMOT WITH POSHYG/POSMOT WITH NEGMOT
T-TEST      PAIRS=NEGMOT WITH NEGHYG/POSHYG WITH NEGHYG
T-TEST      PAIRS=X27 WITH X43/X28 WITH X44/X29 WITH X45/X30
              WITH X46

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T-TEST PAIRS=X31 WITH X47/X32 WITH X48/X33 WITH X49/X34
 WITH X50
 T-TEST PAIRS=X35 WITH X51/X36 WITH X52/X37 WITH X53/X38
 WITH X54
 T-TEST PAIRS=X39 WITH X54/X39 WITH X55/X40 WITH X56/X41
 WITH X57/
 T-TEST PAIRS=X42 WITH X58

ONE-WAY ANALYSIS OF VARIANCE

ONEWAY F1 to F16 BY X01(1,6)
 STATISTICS ALL
 RANGES=SCHEFFE(.05)/
 RANGES=LSD(.05)/
 ONEWAY F1 TO F16 BY X03(1,5)
 STATISTICS ALL
 RANGES=SCHEFFE(0.05)/
 RANGES=LSD(.05)/
 ONEWAY F1 TO F16 BY X04(1,3)
 STATISTICS ALL
 RANGES=SCHEFFE(.05)/
 RANGES=LSD(.05)/
 ONEWAY F1 TO F16 BY X05(1,4)
 STATISTICS ALL
 RANGES=SCHEFFE(.05)/
 RANGES=LSD(.05)/
 ONEWAY F1 TO F16 BY X08(1,5)
 STATISTICS ALL
 RANGES=SCHEFFE(.05)/
 RANGES=LSD(.05)/
 ONEWAY F1 TO F16 BY X10(1,6)
 STATISTICS ALL
 RANGES=SCHEFFE(0.05)/
 RANGES=LSD(.05)/
 ONEWAY F1 TO F16 BY X11(1,5)
 STATISTICS ALL
 RANGES=SCHEFFE(.05)/
 RANGES=LSD(.05)/
 ONEWAY F1 TO F16 BY ORGCOM(1,7)
 STATISTICS ALL
 RANGES=LSD(.05)/
 RANGES=SCHEFFE(.05)/
 ONEWAY X08,X11,ORGCOM BY X01(1,6)/
 STATISTICS ALL
 RANGES=LSD(.05)/
 RANGES=SCHEFFE(.05)/
 ONEWAY X08,X11,ORGCOM BY X03(1,5)/
 STATISTICS ALL
 RANGES=LSD(.05)/
 RANGES=SCHEFFE(.05)/

ONEWAY	X08,X11,ORGCOR BY X04(1,3)/
STATISTICS	ALL
	RANGES=LSD(.05)/
	RANGES=LSD(.05)/
ONEWAY	X08,X11,ORGCOR BY X05(1,4)/
STATISTICS	ALL
	RANGES=SCHEFFE(.05)/
	RANGES=LSD(.05)/
ONEWAY	X08,X11,ORGCOR BY X08(1,5)/
STATISTICS	ALL
	RANGES=LSD(.05)/
	RANGES=SCHEFFE(.05)/
ONEWAY	X08,X11,ORGCOR BY X10(1,6)/
STATISTICS	RANGES=SCHEFFE(.05)/
ONEWAY	ALL
STATISTICS	X11 BY ORGCOR(1,7)/
STATISTICS	ALL
	RANGES=SCHEFFE(.05)/

INDEPENDENT T-TESTS

T-TEST	GROUPS=X02/VARIABLES=F1 TO F16
T-TEST	GROUPS=X06/VARIABLES=F1 TO F16
T-TEST	GROUPS=X09/VARIABLES=F1 TO F16
T-TEST	GROUPS=X02/VARIABLES=X08,X11,ORGCOR
STATISTICS	ALL
T-TEST	GROUPS=X06/VARIABLES=X08,X11,ORGCOR
STATISTICS	ALL
T-TEST	GROUPS=X09/VARIABLES=X08,X11,ORGCOR
STATISTICS	ALL

OTHER STATISTICAL OPERATIONS

FREQUENCIES	GENERAL=X01 TO X58,ORGCOR
PEARSON CORR	ORGCOR WITH X09
PEARSON CORR	X10 WITH X09
PEARSON CORR	X01 TO X10 WITH X11,X08,ORGCOR
PEARSON CORR	X08,ORGCOR WITH X11
PEARSON CORR	ORGCOR WITH X11
FINISH	

APPENDIX B

HUMAN SUBJECTS APPROVAL

CRP # _____
Date Received _____

APPLICATION FOR REVIEW OF RESEARCH
INVOLVING HUMAN SUBJECTS
Submitted by James K. Bowles

I. Identification of Project:

Project Director-	James K. Bowles, Graduate Student, Department of Educational Administration and Supervision
Doctoral Committee Chair-	Dr. John Lovell, Professor Department of Educational Administration and Supervision
Title of Project- (Dissertation)	An Investigation of Organizational Commitment, Facet Satisfaction, and Intent to Leave Among Employees at the University of Tennessee, Knoxville
Estimated Starting Date-	April 6, 1981
Estimated Completion Date-	June 1, 1981

II. Objectives of Project:

The objective of this study is to gain greater insight into employee attitudes within two large employee groups at the University (faculty and exempt staff) and to compare those two groups along three specific categories; organizational commitment, various facets of job satisfaction/dissatisfaction, and intention to remain with the university. Additional demographic variables will also be considered in relation to each of these categories. (For additional information see p. 12 of enclosed proposal.)

III. Description of Subjects:

- 1) 250 Exempt Staff, who will be chosen randomly from a computer listing of personnel at the University of Tennessee, Knoxville. (Exempt Staff is defined in the personnel manual as "one who is not primarily engaged in academic instruction, research, or service; who holds a position of administrative or managerial responsibility requiring recognized professional achievement acquired either by formal training equivalent experience.)
- 2) 250 Faculty, who will be chosen randomly from a computer listing from Academic Affairs. (For the purpose of this study, faculty members will be defined as any full-time academic staff member who's primary

duties include instruction, research, or service and have the rank of professor, associate professor, assistant professor, or instructor and including academic administrators.)

IV. Methods of Procedures:

On April 6th, all subjects described above will be mailed identical three-part questionnaires through campus mail (see attached survey instrument). Respondents will be asked to complete the questionnaire and return it to Room 2101, Dunford Hall, also via campus mail. A follow-up letter will be sent on April 13th in order to facilitate a high response rate. Starting April 16th, phone calls may be made to encourage a return of the completed questionnaire.

V. Protection Methods:

Due to the nature of the survey instrument, it is not felt that there is any need for any specific protection control measures. To insure the anonymity of respondents, the cover letter will stipulate that no name should appear on the instrument. Return envelopes will have no return address and the addressed cover letter will not be physically attached to the survey instrument.

VI. Method of Obtaining "Informed Consent" from Subjects:

Due to the nature of this project and the fact that its implementation would result in the absolute minimal degree of risk to those participating in the survey, the following statement has been prepared as an adequate means of meeting the "informed consent" criteria. This statement will appear in the body of each cover letter that will accompany each questionnaire:

Of course, your participation is voluntary, and your replies will be confidential. The return of this questionnaire constitutes your informed consent of participation in this study. Data will be reported on a group basis and individual responses will not be revealed. Please understand that you are free to withdraw from this project without prejudice at anytime during the course of this study.

VII. Qualifications of the Investigator:

Researcher has successfully completed all required research course work leading to preparation for completing dissertation.

VIII. Adequacy of Facilities to Support Research:

Not applicable for this research project.

IX. Responsibility of Project Director:

By compliance with the policies established by the University Committee on Research Participation, the Project Director subscribes to the broad principles stated in "The Declaration of Helsinki" and standards of professional ethics in all research, development and related activities involving human subjects under the auspices of The University of Tennessee, Knoxville,

- a. When appropriate, Form DHEW 596 will be completed and returned to the Office of the Vice Chancellor for Graduate Studies and Research, 404 Andy Holt Tower.
- b. Approval will be obtained from the University Committee prior to instituting any change in project protocol.
- c. Development of any unexpected risks will be reported to the University Committee.
- d. Signed consent statements will be kept for the duration of the project and for at least three years thereafter.
- e. A status report (Form D) will be submitted at 12 month intervals, or as requested, attesting to the current status of the project.

Signature:

Project Director

Date

[Signature]
3/6/81

X. Departmental Review:

COMMENTS/RECOMMENDATIONS:

The application described above has been subjected to departmental review and has been approved.

Signatures:

Department Head

Date

Chair, Departmental Committee

Date

[Signature]

3-6-87

[Signature]

2-6-81

APPENDIX C

COVER LETTER FOR ORIGINAL MAILING

THE UNIVERSITY OF TENNESSEE
KNOXVILLE 37916
COLLEGE OF EDUCATION

DEPARTMENT OF
EDUCATIONAL ADMINISTRATION
AND SUPERVISION

Dear Faculty Member:

We realize that this is probably a very hectic time of year for you but we are asking your assistance in completing the enclosed questionnaire. This instrument is designed to gather information relating to faculty job attitudes and specifically, the nature of faculty job satisfaction. We feel that accurately assessing current faculty needs is an important dimension in analyzing the current state of higher education in Tennessee.

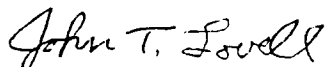
This study is being conducted by Jim Bowles, a doctoral student at the University of Tennessee, Knoxville, under the supervision of his doctoral committee. The population of this study includes several institutions of higher education in the state of Tennessee.

The questionnaire has been designed so that it can be completed in a minimal amount of time. Once you have completed the questionnaire please use the self-addressed, stamped envelope that has been provided for your use to return the completed instrument to us as soon as possible.

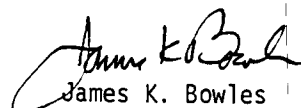
Of course, your participation is voluntary and your replies will be kept confidential. The return of this questionnaire constitutes your informed consent of participation in this study. Data will only be reported on a group basis and individual responses will not be revealed. Please understand that you are free to withdraw from this project without prejudice at anytime during the course of this study. If you have any questions at all regarding the nature of this research do not hesitate to contact us.

Your prompt attention to this survey instrument is essential to the completion of this study. Your participation is vital and your responses are extremely important to this investigation. Thank you for your assistance in this matter.

Sincerely,



Dr. John T. Lovell
Professor, EA & S
The University of Tennessee,
Knoxville



James K. Bowles
Researcher
The University of Tennessee,
Knoxville

APPENDIX D

FOLLOW-UP LETTER

THE UNIVERSITY OF TENNESSEE
KNOXVILLE 37916
COLLEGE OF EDUCATION

DEPARTMENT OF
EDUCATIONAL ADMINISTRATION
AND SUPERVISION

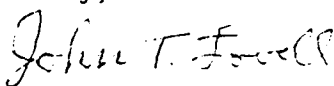
Dear Faculty Member:

Help! Several days ago you received a survey that was part of a research project that is being conducted for a doctoral dissertation at the University of Tennessee, Knoxville.

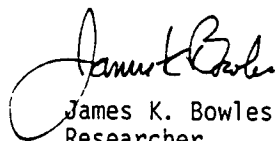
I am sure you are well aware of the cost these days both in time and in dollars, of doing any kind of research. For this reason we are trying to complete this project as quickly and as efficiently as possible with the goal of attaining a 75% + rate of return. The purpose of this letter is to ask you, or to implore you, to please assist us by completing the instrument that was mailed to you last week. The questionnaire was designed so that it could be completed in a matter of minutes and could be returned very easily in the self-addressed, stamped envelope that was included for your convenience.

Thank you in advance for putting this request near the top of your "to do" list. If you have already sent your survey's we greatly appreciate your assistance.

Sincerely,



Dr. John T. Lovell
Professor, EA & S
The University of Tennessee,
Knoxville



James K. Bowles
Researcher
The University of Tennessee,
Knoxville

APPENDIX E

RESEARCH QUESTIONNAIRE

FACULTY ATTITUDE SURVEY

1. Age
 - ☐ A. Less than 25 years of age
 - ☐ B. 25 years but less than 30 years of age
 - ☐ C. 30 years but less than 40 years of age
 - ☐ D. 40 years but less than 50 years of age
 - ☐ E. 50 years but less than 65 years of age
 - ☐ F. 65 years of age or older
2. Sex
 - ☐ Male
 - ☐ Female
3. Highest level of education
 - ☐ High School Diploma ☐ Masters
 - ☐ Two Years of College ☐ Doctorate
 - ☐ Bachelors
4. Type of Institution Where Currently Employed
 - ☐ Community College
 - ☐ Private College or University
 - ☐ Public University
5. What is your rank
 - ☐ Professor
 - ☐ Associate Professor
 - ☐ Assistant Professor
 - ☐ Instructor
6. Do you currently have tenure?
 - ☐ yes
 - ☐ no
7. Are you classified as Academic Administration?
 - ☐ yes
 - ☐ no
8. In general, are you satisfied with your job?
 - ☐ A. Very Satisfied
 - ☐ B. Somewhat Satisfied
 - ☐ C. Not Sure One Way Or The Other
 - ☐ D. Somewhat Dissatisfied
 - ☐ E. Very Dissatisfied
9. Are you married?
 - ☐ yes
 - ☐ no
10. Length of service at your institution
 - ☐ A. Less than 2 years
 - ☐ B. 2 years but less than 5 years
 - ☐ C. 5 years but less than 10 years
 - ☐ D. 10 years but less than 15 years
 - ☐ E. 15 years but less than 20 years
 - ☐ F. 20 years and over
11. If I have my own way, I will be working here a year from now.
 - ☐ A. Strongly Agree
 - ☐ B. Agree
 - ☐ C. Don't Agree Or Disagree
 - ☐ D. Disagree
 - ☐ E. Strongly Disagree

No.	Office Use
1	
2	
3	
4	
5	
6	
7	
8	
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10	
11	

Think of a time you felt exceptionally bad about your present job either recently or any other time. The bad feelings you had about your job may have been caused by some of the factors listed below. Indicate by circling (0) the extent to which each factor contributed to negative attitudes toward your job:

	1	2	3	4	5	6	7	8	9	10		Office Use
1. The lack of RECOGNITION for achievement, acknowledgement or approval for demonstrated ability or performance.	No									Maximum		43
	Contribution									Contribution		
2. The lack of ACHIEVEMENT or specific success, or feelings of success such as a successful accomplishment or making a worthwhile contribution, etc.	No									Maximum		44
	Contribution									Contribution		
3. THE WORK ITSELF, the actual doing of the job or the tasks of the job.	No									Maximum		45
	Contribution									Contribution		
4. RESPONSIBILITY. Not having a full charge of a job or situation, opportunities to exercise initiative and participate in decisions.	No									Maximum		46
	Contribution									Contribution		
5. The lack of ADVANCEMENT or change or improvement in status, position, progress or furtherance of career.	No									Maximum		47
	Contribution									Contribution		
6. The lack of POSSIBILITY FOR GROWTH and the opportunity to develop your potential.	No									Maximum		48
	Contribution									Contribution		
7. SUPERVISION. Technical or managerial incompetence of those in direct or indirect control.	No									Maximum		49
	Contribution									Contribution		
8. PERSONAL LIFE, effects that your job has on your standard of living, acceptance in the community, etc.	No									Maximum		50
	Contribution									Contribution		
9. The lack of STATUS or prestige associated with your job.	No									Maximum		
	Contribution									Contribution		
10. JOB SECURITY	No									Maximum		52
	Contribution									Contribution		
11. WORKING CONDITIONS, the physical conditions, the amount of work, the work facilities, etc.	No									Maximum		53
	Contribution									Contribution		
12. RELATIONSHIPS WITH SUPERIORS	No									Maximum		54
	Contribution									Contribution		
13. RELATIONSHIPS WITH CO-WORKERS	No									Maximum		55
	Contribution									Contribution		
14. RELATIONSHIPS WITH SUBORDINATES	No									Maximum		56
	Contribution									Contribution		
15. UNIVERSITY POLICY & ADMINISTRATION. Personnel and operational policies procedures and practices.	No									Maximum		57
	Contribution									Contribution		
16. SALARY. All forms of direct or indirect compensation, and collateral benefits.	No									Maximum		58
	Contribution									Contribution		

Job Factor Questionnaire

Think of a time you felt exceptionally good about your present job either recently or any other time. The good feeling you had about your job may have been caused by some of the factors listed below. Indicate by circling (0) the extent to which each factor contributed to positive attitudes toward your job:

	1	2	3	4	5	6	7	8	9	10	
1. RECOGNITION for achievement, acknowledgement or approval for demonstrated ability or performance.	No									Maximum	
	Contribution									Contribution	
2. ACHIEVEMENT, or specific success, or feeling of success such as a successful accomplishment or making a worthwhile contribution.	No									Maximum	
	Contribution									Contribution	
3. THE WORK ITSELF, the actual doing of the job or the tasks of the job.	No									Maximum	
	Contribution									Contribution	
4. RESPONSIBILITY. Having a full charge of a job or situation, opportunities to exercise initiative and participate in decisions.	No									Maximum	
	Contribution									Contribution	
5. ADVANCEMENT or change or improvement in status, position, progress or furtherance of a career.	No									Maximum	
	Contribution									Contribution	
6. POSSIBILITY FOR GROWTH and the opportunity to develop your potential.	No									Maximum	
	Contribution									Contribution	
7. SUPERVISION. Technical or managerial competence of those in direct or indirect control.	No									Maximum	
	Contribution									Contribution	
8. PERSONAL LIFE. Effects that your job has on your family life, standard of living, acceptance in community etc.	No									Maximum	
	Contribution									Contribution	
9. STATUS. Prestige associated with your job.	No									Maximum	
	Contribution									Contribution	
10. JOB SECURITY	No									Maximum	
	Contribution									Contribution	
11. WORKING CONDITIONS, the physical conditions, the amount of work, the work facilities, etc.	No									Maximum	
	Contribution									Contribution	
12. RELATIONSHIP WITH SUPERIORS	No									Maximum	
	Contribution									Contribution	
13. RELATIONSHIPS WITH CO-WORKERS	No									Maximum	
	Contribution									Contribution	
14. RELATIONSHIPS WITH SUBORDINATES	No									Maximum	
	Contribution									Contribution	
15. UNIVERSITY POLICY & ADMINISTRATION. Personnel and operational policies, procedures, and practices.	No									Maximum	
	Contribution									Contribution	
16. SALARY. All forms of direct or indirect compensation and collateral benefits.	No									Maximum	
	Contribution									Contribution	

Office
Use
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APPENDIX F

PORTER PERMISSION LETTER

THE UNIVERSITY OF TENNESSEE

Knoxville 37916

Residence Halls Area Offices

January 14, 1981

GRADUATE SCHOOL

JAN 19 1981

Dunford Hall, Room 2101
821 Volunteer Boulevard

Area Code 615
Phone 974-2451

Dr. Lyman W. Porter
Dean of Graduate School Administration
University of California
Irvine, California 92717

Dear Dr. Porter:

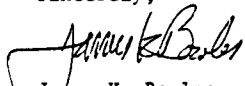
I am currently in the process of working on a dissertation through the Department of Educational Administration and Supervision at the University of Tennessee, Knoxville. My topic will deal with various factors that relate to intention of university personnel to leave their jobs. One such factor that I would like to examine, in relation to intent to turnover, would be organizational commitment.

After reading your article entitled "The Measurement of Organizational Commitment" I have become very interested in using the Organizational Commitment Questionnaire as part of my research.

Since I believe that the OCQ is unpublished I would greatly appreciate your permission to use it as part of my study. I would be more than happy to supply you with any information that you would like to have as a result of my research.

Your consideration would be deeply appreciated.

Sincerely,


James K. Bowles
East Area Coordinator
University of Tennessee

JKB:wfm

Dear Mr. Bowles:

You have my permission to use my OCQ in your research.


Lyman W. Porter

Clement

Dunford

Greve

Hess

Massey

Melrose

Strong

APPENDIX G

DARROW PERMISSION LETTER

DEPARTMENT OF THE AIR FORCE
COMMUNITY COLLEGE OF THE AIR FORCE (ATC)
MAXWELL AIR FORCE BASE, AL 36112

23 March 1981



Mr. James K. Bowles
East Area Coordinator
The University of Tennessee
Knoxville TN 37916

Dear Mr. Bowles:

You have my permission to use the version of the Job Factor Questionnaire that appears in my dissertation. I have no additional reliability or validity information on the JFQ.

I am curious who at my "alma mater" had listed me as still in Europe.
Best wishes on your dissertation.

Sincerely,

Ly E Darrow
LYLE E. DARROW, Colonel, USAF
President

VITA

James Kennon Bowles was born at Scott Air Force Base, Illinois, on February 15, 1953. Graduating from Fort Hunt High School in Alexandria, Virginia, in June, 1971, he then attended Madison College where he earned a Bachelor of Science degree with a major in psychology and a minor in sociology, graduating in June, 1975.

Following completion of his undergraduate program, he enrolled at James Madison University where he received a Master's of Education degree in Counselor Education in May, 1977. During his graduate program at James Madison, he worked as a graduate hall director for the Department of Residence Halls.

In the fall of 1977, the author was employed by The University of Tennessee, Knoxville, as a head resident. In 1978 he enrolled in Graduate School at The University of Tennessee, Knoxville, and eventually received his Doctor of Education degree with a major in Educational Administration and Supervision in June, 1983. He is currently employed by The University of Tennessee, Knoxville, as assistant to the director of residence halls.

He is married to the former Kimberly Annette Owsley of Blountville, Tennessee.