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FACULTY JOB SATISFACTION: EFFECTS OF RELATIONSHIPS BETWEEN CHAIRPERSON'S LEADERSHIP BEHAVIOR AND CHAIRPERSON'S VALUE SYSTEM

DISSERTATION

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

by

Tibbie Sheku Kposowa, B.A., M.A., M.A.

*****

The Ohio State University

1984

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DEDICATION

This dissertation is dedicated to my parents, the late P. C. Francis Kposowa and Selina Kposowa. Their parental love, economic sacrifices and encouragement enabled me to achieve this high level of education. I make this dedication with sincere gratitude and appreciation of their kindness.
ACKNOWLEDGMENTS

I wish to acknowledge the encouragement and scholarly support given to me by my academic adviser, Dr. William Moore, Jr. Without his guidance it would have been much more difficult to complete this project. I also wish to express my gratitude to Dr. Virgil Blanke, Dr. Robert Silverman, and especially to Dr. Tom Milburn, for serving on the reading committee and for their valuable comments and suggestions. My special thanks go to Dr. Robert Billings for his advice on the theoretical aspect of the study and for his valuable criticisms of my methodology. Special thanks also go to Dr. Joseph Licata for his advice on the development of the dissertation proposal.

When one undertakes a project of this magnitude there are friends who usually offer their moral support. One such friend is Miss Esther K. Kitundu. I wish to express special gratitude to her for her support and sincere good wishes. Special thanks also go to her for typing a substantial part of the manuscript and address labels and for helping with the keypunching of the instrument responses.
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CHAPTER I
THE RESEARCH PROBLEM

Introduction: Background of the Problem

Any attempt to determine what gives the university faculty satisfaction with the nature of its job becomes complicated by the fact that faculty members tend to owe allegiance primarily to their respective disciplines and secondarily to the governing bodies of the universities that employ them (Clark, 1960; Demerath, 1967; Caplow and McGee, 1958; Storm and Finkle, 1965). On the one hand college administrators expect the faculty as employees to show considerable interest in the governance of the university and to execute administrative duties. Among these administrative duties are: serving as members and chairpersons of committees, representing the department and the university before the public, and coordinating faculty and student activities. In doing all this the faculty ends up making policy and administrative decisions. On the other hand the faculty members as professionals tend to care more for the priorities set by their respective disciplines. Among these priorities are recognition by colleagues for significant discovery in the
discipline, the defence of academic freedom and respect for the academic and moral standards of their respective collegial associations.

This split allegiance can lead to tensions and conflicts between the administration and the faculty. A careful examination of faculty-administration relationships led Williams (1955) to conclude that "modern university organization in the United States...embodies a continuous struggle between the centralized-bureaucratic system and the diffused-collegial system" (p. 298).

Duality of allegiance sometimes makes it difficult for chairpersons and other administrators to satisfy faculty members because even when their leadership behavior is supportive of faculty interests, there is no guarantee that such behavior would lead to faculty job satisfaction. According to Demerath (1967) one of the strategies used by administrators to reward faculty and reduce tension in the system is to try to adjust academic rank to collegial prestige.

Bureaucratic ladders of ability-rank authority, supposedly parallel, are difficult, if not impossible, to establish in a university faculty because of the collegial organization and the dual system of ranking. Academic rank is conferred by the university, but prestige in the discipline is awarded by outsiders, the latter being a matter of judgment by one's academic peers and not subject to the local institution's control. Most academic professionals value disciplinary prestige and its acknowledged expertise more highly than academic rank. And although university officials often try to adjust rank to
prestige by considering the evaluations of "outsiders" when faculty members are to be appointed or promoted, any given rank will include men of varying prestige. Power, therefore, cannot be tied to specific positions in the form of authority, for, ...such an allocation of authority would establish relationships of subordination and inequality which are inconsistent with the social facts of collegium (1967, p. 29).

The problems facing such genuine attempts and strategies to match academic rank with prestige makes it difficult to locate the sources of faculty job satisfaction. It is, however, important for the better management of academic affairs to find out what can be done to satisfy the needs and the aspirations of the faculty. This study tries to determine faculty job satisfaction with respect to the leadership behavior and the value systems of department chairpersons.

Theoretical Background of the Study

Three of the primary hypotheses used in this study (H1, H2 and H3) were deduced from the value theory of Locke (1969). As for methodology, Locke used the discrepancy-correlation method to determine job satisfaction. However, Wall and Payne (1973) and psychometricians (Lord, 1963; Werts and Lynn, 1970; and McNemar, 1958) have pointed to serious problems that surround the use of discrepancy scores in psychological testing. Wall and Payne contended that the more direct methods of partial and Pearson correlations would yield
coefficients that represent a more accurate and meaningful
description of the relationship between satisfaction and
other variables. To assess their contention two of the
primary hypotheses of this study (H4 and H5) were used to
predict job satisfaction using the Pearson and partial
correlation methods. The results from these two methods
were compared with those of the discrepancy-correlation
method.

According to Locke, it is the perceived job situation
in relation to the individual's values that is the most
direct determinant of job satisfaction. He defines job
satisfaction and job dissatisfaction in terms of job
values.

Job satisfaction is the pleasurable emotional
state resulting from the appraisal of one's job
as achieving or facilitating the achievement of
one's job values. Job dissatisfaction is the un-
pleasurable emotional state resulting from the
appraisal of one's job as frustrating or blocking
the attainment of one's job values or as entailing

Locke's theory is based on two value judgments. The
first is that job satisfaction depends upon the degree of
discrepancy between what the individual wants and what he
perceives himself as getting.

Job satisfaction and dissatisfaction are a function
of the perceived relationship between what one wants
from one's job and what one perceives it as offering
or entailing (Locke, 1969, p. 316).
The difference between what one should be getting (or what one would like to get) and what one is actually getting is correlated with the aspect of the job that is being assessed for satisfaction. Locke claims that the discrepancy method is advantageous because it reflects the intensity of the value (that is, how much of it one wants) and the content of the value (that is, what the subject actually wants). He says that the direct correlation of the satisfaction variable with another aspect of the job is arbitrary because it does not measure the ideal and actual amount of the value for the individual. Thus individual differences in values are ignored.

The second value judgment of Locke is that job satisfaction depends not only on the degree of value-percept discrepancy but on the relative importance of the value to the individual.

In the present study the three hypotheses derived from the above version of the value-satisfaction model are designed to determine faculty job satisfaction from (a) the discrepancy between faculty perception of the desired (ideal) and observed (real) behavior of the chairperson, and (b) the discrepancy between faculty perceptions of the chairperson's value system and of their own value systems. There were two deviations from Locke's theory and method. The first is that in this
study job satisfaction was not determined from values alone. The chairperson's leadership behavior is as important to the faculty as his value system. So faculty job satisfaction was determined from both of them. The second deviation is that Locke's value judgment that satisfaction is contingent upon value importance will not be included in this study. The variables and items on the job satisfaction scale were equally weighted by the researcher. Many studies point to the fact that weighting (attitudes) by importance does not improve the prediction of overall satisfaction (Ewen, 1967; Mikes and Hulin, 1968). In other words, it has not been shown with any consistency (a) that weighting according to rated importance better predicts satisfaction than direct or equal weighting of items of satisfaction; or (b) that, for purposes of estimating overall job satisfaction, importance measures give useful information, over and above that provided by satisfaction scores alone.

Any unsolved problem when dealing with summed measures is that of the appropriate weighting for the areas involved. The methods that have been used include equal weighting, or weighting according to rated importance...Whenever the effects of weighting have been evaluated, they have not improved either psychometric properties of the measures or their relationships with other, objective variables (Smith and Kendall, 1963, p. 8).

Moreover, the strategy of weighting by importance seems to try to show that the most important job component
is more closely related to overall job satisfaction than the least important component. Such strategy adequately treats only part of the relationship between two variables—their extreme aspects—while other aspects are relatively neglected. But in this study it was recognized that since a given item or job aspect may be important to some faculty members and not to others, and that high importance can produce both extreme satisfaction and extreme dissatisfaction, equal weighting seemed to better measure each item for all subjects.

The Relationship between Faculty Job Satisfaction, the Chairperson's Leadership Behavior and the Chairperson's Value System

Two general duties of the chairperson as leader are: (a) general management responsibilities such as office organization, and (b) leadership responsibilities such as motivating and evaluating faculty members. In this study more emphasis was put on leadership responsibilities because these may have considerable impact on faculty attitudes and performance. The following aspects of the chairperson's leadership behavior that affect faculty job satisfaction were dealt with: (a) the chairperson's initiating structure behavior, and (b) the chairperson's consideration behavior. The particular acts of the chairperson fall under these two dimensions of leadership
behavior. Leadership behavior is characterized by a general pattern or style of administering that is recognizable by members of the organization. The term "leadership style" refers to a consistent pattern of decision making and executing policies. This pattern is based on some enduring need of the leader that motivates him or her to undertake particular acts and this need remains relatively constant across leadership situations.

Leadership style refers to the underlying need structure of the individual leader that motivates various behaviors in leadership situations (Landy and Trumbo, 1980, p. 412).

Therefore, there is no one ideal type of chairperson. There are many types because each institution has its own history, tradition, goals and problems and the chairperson develops his style with respect to these characteristics. If, for example, the department has a long-standing history of losing outstanding faculty members, an enduring need of the chairperson would be to improve the academic reputation of the department and the conditions of service for the faculty. He would seek the help and cooperation of the president and the academic dean in satisfying this need. In this case the underlying need that motivates the chairperson to appeal to higher administrators is the constant loss of outstanding faculty.
The individual acts of the chairperson are also based on his personal and work values. Each leadership act is judged to be appropriate or inappropriate, good or bad with respect to his personal and work values. Thus there is an interaction between values and leadership behavior. The chairperson's values consist in the standard with respect to which he makes judgments and are organized in a system within which some values are relatively more important than others.

No matter what the leadership behavior and the value system of the chairperson are, they may have significant impact on faculty job satisfaction. This is more so in the case of large state universities where, because of their size and program diversification, departments enjoy considerable autonomy as academic and governing units. The chairperson becomes both the administrator within the department and the chief mediator between his unit and the central administration.

As the growth of colleges and universities has progressed in the United States so that more than eleven million students attend institutions of higher learning today, the importance of the academic department has increased and, in the view of some, has become "the basic academic component." This is believed to be so because the increased specialization of knowledge has made it imperative that faculty members identify with that unit of university life from whence their discipline derives all its resources, that is, the department (Falk, 1979, p. 79).
Carroll (1976) and Clark (1960) have observed the significant role that the leadership behavior and value system of the chairperson can play in departmental management. Carroll studied the "severe behavioral problem facing departmental administrators" from the point of view of role conflict. He examined empirical data on the six decision areas which he thought were the sources of conflicting expectations within the department. One of his findings is that "role conflict is associated with decreased satisfaction" (1976, p. 245). Clark (1960) states that one of the four trends in the social organization of the campus is the multiple value system.

The faculty is equally if not more prone to diversity in orientation, as men cleave to their specialized lines of work and their different perspectives and vocabularies...The value systems of the faculty particularly cluster around the individual disciplines and hence at one level of analysis there are as many value systems as there are departments (p. 239).

This diversity of value systems seems to be a significant source of tension and job dissatisfaction. The leadership behavior and value systems of the chairperson are so closely interrelated that both are crucial in decreasing tensions to a tolerable degree and in providing conditions that lead to job satisfaction. Therefore, this study focuses on faculty job satisfaction with respect to faculty perceptions of the leadership behavior and the value systems of chairpersons.
Statement of the Problem

Before faculty members can derive satisfaction from the chairperson's behavior they have to perceive such behavior as supportive, to some degree, of certain academic and career goals. Faculty job satisfaction can be derived first, from their perceiving the chairperson's real behavior to be close to or congruent with, to a considerable degree, the behavior of their ideal chairperson; and second, from their perceiving that the chairperson's value system is congruent, to a considerable degree, with theirs.

In addition to overall faculty perceptions, there are different demographic groups among them. These groups, based on sex, rank, age, degree, length of service, etc., have different perceptions of the leadership behavior of the chairperson and are satisfied with their job in different degrees. Knowledge of the job satisfaction and different perceptions of the chairperson's performance by different demographic groups is also important for the better management of the department because it would enable the chairperson to know which groups need more attention and what to do to balance his policies with respect to all groups.

The problem of this research consists in the following three questions: (1) How significant is the
effect of the degree of discrepancy between the desired (ideal) and observed (real) behavior of the chairperson on faculty job satisfaction? (2) What is the effect of the degree of discrepancy between faculty perception of the chairperson's value system and of their own value systems on faculty job satisfaction? (3) To what extent do different demographic groups among the faculty differ with respect to their job satisfaction and their perceptions of the chairperson's leadership behavior and value system.

**Statement of the Purpose**

The major purpose of this study was to determine faculty job satisfaction with respect to faculty perceptions of the chairperson's leadership behavior and the chairperson's value system. Job satisfaction was determined by means of discrepancy scores and also by means of the more direct partial and Pearson correlation scores.

There were two secondary purposes. The first secondary purpose was to compare the coefficients yielded from the three methods of discrepancy, partial and Pearson correlations in order to find out which one represents a more accurate and meaningful description of the relationship between job satisfaction and other variables. The second secondary purpose was to determine
the significant differences between the perceptions of
the different demographic groups (sex, rank, age, degree
and length of service) with respect to their job
satisfaction, the chairperson's leadership behavior and
the chairperson's value system.

Significance of the Study

Because of the relative autonomous status of
academic departments in large state universities, the
role and functions of the chairpersons are becoming more
crucial to the overall management of university affairs.
The overall faculty job satisfaction is becoming sub­
stantially dependent upon faculty perceptions of the value
systems and leadership behavior of their chairpersons.
This is because the faculty have access more readily to
the chairperson than they have to the deans, the
president and the boards of trustees. There is therefore
need to provide higher educational institutions with
information on the leadership behavior of the chair­
person and how such behavior affects overall faculty job
satisfaction. The findings of this study may enable the
department chairperson to know the degree to which his
administrative policies and style are affecting overall
faculty job satisfaction. It may enable him to know
which demographic groups among the faculty have percep­
tions that are incongruent with both his system of values
and leadership behavior. He can thus initiate strategies to reduce the discrepancies and improve faculty-chairperson relationships.

Assumptions

The following are the basic assumptions of this study:

1. Due to the expanding bureaucracy of the state universities the top administrators have made the academic departments relatively independent of the central administration. The increase in autonomy is accompanied by an increase in the role and influence of the departmental chairpersons. The leadership behavior and value systems of the chairperson are therefore significantly affecting faculty job satisfaction. It is assumed in this study that the degree to which faculty job satisfaction is affected can be measured.

2. There are differences between the perceptions of the different demographic groups with respect to the chairperson's behavior and value system. The groups that are different can be identified. The degree to which one group's perception is higher than the other can also be measured.
3. When the degree to which the groups are different in their perceptions is understood, the chairpersons can develop policies to address the needs of the dissatisfied groups. This would improve the degree of overall job satisfaction.

**Hypotheses**

The following five primary hypotheses were tested:

1. The lesser the degree of discrepancy between faculty members' perceptions of the desired (ideal) and observed (real) leadership behavior of the chairperson, the greater the degree of faculty job satisfaction.

2. The lesser the degree of discrepancy between faculty members' perceptions of their chairperson's value system and of their own value systems, the greater the degree of faculty job satisfaction.

3. The lesser the degree of discrepancy between faculty members' perceptions of their chairperson's value system and of their own value systems, the lesser the degree of discrepancy between faculty members' desired (ideal) and observed (real) leadership behavior of the chairperson.
4. The greater the degree of faculty members' perceptions of the leadership behavior of their real chairperson, the greater the degree of faculty job satisfaction.

5. The greater the degree of faculty members' perceptions of their real chairperson's value system, the greater the degree of faculty job satisfaction.

The following null hypothesis was also tested:

$H_0$: There are no differences in perceptions between demographic groups of faculty members with respect to (a) real chairperson's leadership behavior, (b) real chairperson's value system, and (3) faculty job satisfaction.

**Definition of Terms**

The following terms need to be explicitly defined so that a common understanding of their use in this study can be achieved.

*Leadership behavior* is used to refer to the acts of the chairperson as he initiates policies, encourages and organizes the faculty. Fiedler's definition of leadership seems appropriate for this study.

By *leadership behavior* we generally mean the particular acts in which a leader engages in the course of directing and coordinating the work of his group members. This may involve such acts as structuring the work relations, praising or criticizing group
members, and showing consideration for their welfare and feelings (Fiedler, 1967, p. 36).

Such behavior of the chairperson as leader is regarded as supportive with respect to the faculty if that behavior contributes to the development of the administrative style and policies that improve individual and collective faculty welfare.

Chairperson's initiating structure behavior describes the degree to which the chairperson originates, facilitates or resists new plans, ideas, practices and policies. This dimension is task-oriented and deals not only with the way the chairperson organizes the group and integrates the different parts, but also, with the strategy he employs to get the job done.

Chairperson's consideration behavior "describes behavior indicative of friendship, mutual trust and respect, and good 'human relations' between the leader and his group" (Stogdill and Coons, 1957, p. 104).

The chairperson is that officer and teacher to whom the academic dean assigns substantial responsibility for managing the academic and administrative affairs of the department.

The term regular faculty refers to all persons with the titles of professor, associate professor, assistant professor and instructor who serve on appointments totalling fifty percent or more service to the university.
Their duties are teaching, research and service to the department, college and university, and public service related to their academic discipline.

Scott's definition of personal values is used in this research. He regards values as moral ideals and frames of reference for assessing the goodness of an object. A value is defined as "...an individual's concept of an ideal relationship (or state of affairs), which he uses to assess the 'goodness' or 'badness', the 'rightness' or 'wrongness', of actual relationships that he observes or contemplates" (1965, p. 3). In this study such a concept of ideal relationship is expressed in terms of personal preference for one conduct or object over another. When a person says that a certain mode of conduct that he values is right, he is expressing a personal preference for it based on what he believes to be an ideal state of affairs.

Since values are individual concepts of an ideal relationship, the term value system refers to the organization of such concepts or beliefs along a continuum of relative importance. Rokeach's definition of value system seems to be appropriate here: "A value is an enduring organization of beliefs concerning preferable modes of conduct or end-states of existence along a continuum of relative importance" (1973, p. 5).
Job satisfaction is the feeling or emotional state resulting from the perception of a person's job as fulfilling his expectations, needs and values.

Limitations of the Study

The scope of this study was limited to the faculty in three large state universities in Ohio. Additional limitations are as follows:

1. These state universities have similar administrative structures and, although their academic chairpersons may have different styles and policies, they perform similar duties. They all offer undergraduate and graduate programs up to the doctoral level. Their regular faculty are expected to perform the duties of teaching, research and public service. Each university has a student enrollment of at least 10,000 students.

2. Because the characteristics of state universities in Ohio are in many respects--sources of support, salary scale, faculty characteristics and development--different from other kinds of higher educational institutions, the findings of this study may only be generalizable to state universities in the United States that are similar in nature.
3. The instrument was completed by faculty members. The chairpersons were excluded. Only the perceptions of the faculty were needed for testing the hypotheses of the study.

4. The study was limited by the kind of method used for data gathering and by the nature of the information gathered. Since the questionnaire was used to collect data, the researcher had no direct way of verifying the accuracy of responses given. The items on the instrument were designed for a descriptive study. So the interpretations of the results could be based only on degrees of association between variables and not on cause-effect relationships.
CHAPTER II

REVIEW OF RELATED LITERATURE

The extensive review of literature done for this study showed that not much research was done on the role, duties and responsibilities of department chairpersons before the 1960s. Heimler (1967) who conducted one of the most definitive studies on the role of department chairpersons states that "very little research has been done on the chairman's place in management and administration" (p. 163). Another observation made during the review was that there is no agreement on the definition of the chairperson's role among researchers. Smith (1972) states that "the lack of a clear definition of the chairperson's role appears to be a major problem confronting community colleges" (p. 40). Falk (1979) states that "the chairmen themselves, the faculty they serve, and the administrators who depend on them often cannot agree as to what the chairmen should do on a daily basis" (p. 80). One main difficulty associated with defining the role of the chairperson is that the role changes over time and varies with respect to the kind and size of educational institution. Roach (1979)
observed that "the academic department chairperson shifts from being a subject matter specialist to a developer of departmental programs and a partner in shaping the educational mission of the school" (p. 13).

Heimler (1967) pointed out eleven areas that need to be investigated. One of these is the relationship between departmental management and the values and professional goals of faculty members (p. 163). The need for such an investigation is becoming more pressing because factors such as decentralization of decision making authority, specialization of knowledge, growth in size of institutions, and diversification of departmental activities have made faculty-chairperson relationships to be very complex and difficult to manage. Woodburne (1958, p. 77) states that probably 80 percent of all administrative decisions take place at the department level. Adequate study of the complex departmental operations entails understanding, among other things, the relationship between variables such as leadership behavior, values and job satisfaction.

This literature review is divided into the following parts: (1) the job and responsibilities of the chairperson; (2) leadership behavior; (3) job satisfaction and values; and (4) implications of the theories on leadership, values and job satisfaction for the present study.
A. THE CHAIRPERSON AS LEADER AND SCHOLAR

1. The Job and Responsibilities of the Chairperson

Heimler (1967) states that the chairperson's responsibilities fall into three categories: administration, faculty leadership and student advising.

The chairman is expected to perform the managerial tasks requisite to the operation of the department. He furnishes faculty leadership in the formulation of college and departmental policies, the improvement of instruction, curriculum development, and the stimulation of faculty research and scholarship. As an administrative officer, the chairman provides advice and assistance to students about their academic programs and about college regulations (p. 159).

Heimler states that the chairman's job includes the following specific administrative tasks:

(1) improving instruction; (2) developing and revising courses; (3) making the semester schedule; (4) developing programs: major, minor, state teaching credential, M.A., general education; (5) recruiting faculty; (6) evaluating faculty and staff; (7) preparing the departmental budget; (8) administering the departmental budget; (9) reviewing and approving student petitions; (10) requisitioning textbooks and library materials; (11) maintaining departmental records; (12) attending meetings and conferences; (13) making faculty schedules; (14) responding to on- and off-campus inquiries regarding college program and regulations; (15) taking care of departmental correspondence; (16) writing student recommendations for employment and graduate school (p. 159).

Smith (1972) expressed the need for a more complete delineation of the chairperson's activities. He developed a questionnaire consisting of 46 job activity statements that he believed are the important responsibilities of the chairperson. The activities are divided into the
following six categories: (1) production—"those chairman activities which would result in product outcomes, i.e., student learning, research, etc." (p. 41); (2) maintenance—this category lists seven maintenance activities of the chairperson; (3) boundary: production supportive activities—"the chairman's participation in the recruitment of departmental faculty and students and his placement of community college students on jobs or in senior institutions" (p. 41); (4) boundary: institutional supportive activities—the attempt by chairpersons "to obtain social support and legitimation for their departments within the college and the local community" (p. 42); (5) adaptive activities—the role of chairpersons as agents of change; and (6) managerial—the duty of chairman "to resolve conflicts between organizational levels, to direct their departmental sub-systems, and to coordinate external departmental requirements and organizational resources and needs" (p. 42).

The purpose of Smith's study was to determine what faculty members, chairpersons and upper echelon administrators think of their chairperson. There were many areas of high consensus among the three groups. He determined consensus in terms of percentages of sample respondents. Job activities receiving 90 percent or more were considered "highly essential" activities of the
chairperson and those receiving 75 to 90 percent were considered "essential." Areas of high consensus included the following duties: orientation of new faculty members; involvement of faculty members in the decision making process of the department; evaluation of faculty members; encouragement of faculty members to participate in conventions, conferences, professional associations; report of departmental accomplishments to the dean; development and review of long-range departmental goals and objectives; planning of curriculum changes with the faculty; etc. The findings of the following two activities are worth noting: (1) Both faculty members and upper echelon administrators support the view that chairpersons should teach at least one class per quarter but chairpersons did not quite agree. This point is worth noting because, although chairpersons want to be regarded as teachers and scholars, the volume of managerial work seems to force them to reduce their teaching load. (2) There was high agreement among chairmen, faculty and upper echelon administrators in Michigan that chairpersons need not conduct research projects. The reason for the chairpersons' reluctance to get involved in research might also be due to the volume of managerial work.
Falk (1979) re-studied the 46 tasks and repeated the work of Smith (1972) using as subjects the professional staff members at the State University of New York at Buffalo. His purpose was to discover the source of role conflict in the chairpersonship. He dealt with issues such as the role conflict the chairpersons experience in trying to represent the interests of the faculty and the administration at the same time; and the value conflicts they experience as they perform managerial tasks which they perceive as having a lower status than scholarship.

Falk found out that although the duties of the chairperson are not clearly defined there is a high consensus among 75 percent of the respondents on 35 out of the 46 tasks. He therefore suggested that there should be emphasis on tasks which everyone feels the chairperson must perform. The high agreement showed that the role conflict in the academic chairpersonship is less considerable than other writers would have us believe. He believed that knowledge of which tasks the chairperson should or should not do is helpful in reducing role conflict to a tolerable degree. The tasks that are not expected of chairpersons and that need not be done by them should be avoided in order to ease the burden of the job.
Roach (1976) lists the functions of the chairperson under the following headings: scholarly functions (teaching and research); planning functions (formulating departmental goals, programs and activities); leadership functions (using human relations skills to communicate with people, organize and coordinate tasks, developing faculty and involving them in departmental jobs); representing and negotiating functions (representing the college, the department, the administration and the students on formal and informal occasions and negotiating on their behalf); problem solving (by reducing the number and magnitude of potential problems, selecting appropriate committee members to investigate problems, etc.); searching for resources (seeking funds and research equipment) and interdepartmental coordination.

Roach, like Falk, observed that in performing these duties, the chairperson experiences conflict of interests and is caught between conflicting groups.

The department chairperson is often caught in the middle of academic and "territorial" battles—caught between reform and faculty conservatives and sometimes caught between what he considers good personnel procedures and union (or other organization) rules and restrictions. Even in the most tranquil of times, he finds his responsibilities and loyalties divided among colleagues, students, and administrators. He is frequently caught between students who want relevancy in their courses and those who state that they are getting "short-changed," between a faculty that believes they should have higher rank with higher pay, decreased loads, increased secretarial help, additional work
and research space, more books, equipment and travel funds, and administrative officials who want every penny accounted for, no funds in any budget overspent, and who, worst of all, may produce rules and regulations to limit departmental options and flexibility (pp. 13-14).

Waltzer (1976) conducted a comprehensive inquiry into the job of the academic department chairperson at Miami University in Ohio. The study was based partly on his own personal experiences as chairperson of the Department of Political Science at Miami University and partly on interviews with other chairpersons and administrators in the same institution. Waltzer listed the responsibilities of the chairperson under the following headings: departmental affairs (conducting meetings and developing and accomplishing departmental missions, etc.); academic affairs (establishing degree programs, etc.); faculty affairs (recruiting, hiring and orienting new faculty, supporting and encouraging faculty growth, etc.); student affairs (curricular and career advising of students, awarding departmental scholarships, etc.); external communication (conveying university policies and actions to the department, representing the department in the university and before external agencies, etc.); budgetary affairs (preparing departmental budget requests, administering budgetary allocations, etc.); office management (administering departmental facilities;
establishing file and record systems, etc.); and
personal professional performance (providing profes-
sional leadership, demonstrating professional
competence, etc).

Waltzer, like the other writers, found out that the
job of the chairperson is not well defined. He there­
fore recommended that "a section be added to the Faculty
and Staff Information Manual on the academic department
chairmanship, generally describing its position in the
university, and its major functions, responsibilities,
authorities and accountabilities" (p. 12).

2. Relationships of the Chairperson with the Faculty

Some of the functions of the chairperson described
above have more impact on the faculty than others.
Heimler (1967) states that the function of leadership is
crucial in faculty-chairperson relationships. But being
academicians and scholars the faculty prefer and admire
leaders that have strong intellectual qualities. "The
chairman's leadership is directly related to his own
strength as a professor: his teaching, scholarship and
professional reputation" (p. 159). Ehrle (1975, p. 29)
states that the faculty is likely to vote as chairperson
someone with some achievement in the discipline. Thus
the myth that "yesterday's good professor is ipso
facto tomorrow's good chairman" still has a place in the search for chairpersons.

Another aspect of the leadership function that faculty members see as important is the ability of their chairperson to obtain funds for the department. Chairpersons express their need for more funds by demanding from the administration more money than is needed. In their study of departments in 15 universities Dressel et al. (1969) found that departments which depended heavily on the university for funds voted for chairpersons who could successfully campaign for more funds from the central administration.

One breed was found in those departments that, by the nature of their discipline, found themselves heavily dependent on the university as their source of funds. In these departments, faculty looked to their chairman to provide the best possible working conditions. They cast about the most articulate and powerful personality among their group and expected him to represent their interests to central administration. When the faculty were confident they had a strong leader, they were willing to entrust him with complete authority in virtually all matters except changes in the curriculum. Though committees existed in profusion, the chairman who succeeded in getting resources could run the show (pp. 275-276).

Dressel et al. observed that in cases where the department was getting lots of funds for research from outside national and international agencies, the faculty showed little concern and even expressed disdain for deans and the central university administration. The strong confidence that these faculty members expressed in
their chairperson was based on "his strong national credentials and his ability to guide younger faculty members into prominence on the national scene" (p. 276).

Two other important factors that Dressel et al. observed in faculty-chairperson relationships were democracy and feedback. "If the opportunity for feedback existed and the departmental members had opportunity to respond and react to communications originated by the executive, it was assumed that a more truly democratic process was operating (1969, p. 277). Their findings showed that the operating style of the 18 departments that got a low rating was oligarchical, while that of the 18 top-rated departments was mostly democratic. Analysis of data also showed that the 18 departments with low ratings tended to have less opportunity for feedback from the faculty than do the 18 top-rated departments.

Faculty-chairperson relationships are quite complex. The factors described above seem to significantly affect most departmental operations. This study tries to throw more light on the role of each factor.

B. LEADERSHIP BEHAVIOR

1. Introduction

The concept of leadership has been the subject of extensive research (Bass, 1981). Although there are many theories of leadership, all of them are, in general,
based on one or more of the following aspects of the leader: (1) personal traits, for example, personality, appearance, and judgment; (2) the group situation, for example, the group climate and the nature of norms and roles; and (3) the interaction of traits and situations.

Since this study employs the personal-situation theory, which is a version of the trait-situation interaction approach to leadership, a substantial part of this review will deal with the interaction approach.

2. The Trait Approach

The trait approach deals with the characteristics of the leader that contribute to effective leadership. Trait theorists that have extensively investigated this area are Bernard (1926), Bingham (1927), Tead (1929), and Kilbourne (1935). These theorists explain leadership in terms of personality and character. This review is concerned only with those studies which try to determine which traits and characteristics of leaders contribute to effective leadership. According to Bass (1981, p. 44) the following are the primary methods used for identifying the personal characteristics of leaders: (a) observation of behavior in group situations, (b) choice of associates (voting), (c) nominating and rating prospective leaders by qualified observers, (d) selecting and testing persons occupying positions of leadership, and (e) analysis of
biographical and case history data. Researchers usually derive traits essential to leadership by asking different groups—executives, professors, etc.—to list them. Traits listed range from physical traits such as age, height, weight, physique, energy, health, appearance, to social and intellectual traits such as intelligence, knowledge, scholarship, judgment and decision making, insight, adaptability, dominance, responsibility, ambition, initiative, emotional control, self-confidence, social skills, etc.

Thrasher (1927) conducted an observational study of emerging leadership qualities in a natural, uncontrolled setting. In his study of 1,313 boys' gangs in Chicago, he observed that the chief trait of the natural leader is "gameness."

He leads. He goes where others fear to go. He is brave in the face of danger. He goes first—ahead of the gang—and the rest feel secure in his presence. Along with this quality usually goes the ability to think clearly in the excitement of a crisis (p. 345).

Some of the characteristics of "gameness" are fearlessness, originality and constructive imagination. Other observed characteristics of the natural leader were quickness and firmness of decision, that is, the making of rapid judgment and resoluteness in backing it up at all cost. Thrasher states that although physical traits such as physique, energy and athletic ability appear to be
associated with leadership status of boys' gangs, intellectual traits can also determine leadership.

The possession of "brains" or imagination is sometimes sufficient to confer the leadership of a gang upon a boy who is entirely unfitted for it from a physical stand point. A hunchback was a very successful leader of a gang of healthy boys. An undersized boy may retain his power in the same way. (1927, p. 350).

Thrasher reports that boys who lacked the traits of natural leader, however, managed to exert control in the gang by possession of special skills or advantages such as knowledge of some special technique useful to the gang and material advantage such as ownership of an automobile.

Jennings (1950) used sociometric methods to determine leadership traits among children. The subjects were asked to describe characteristics which make the nominee desirable as leader. He used a sociogram to show graphically the trait preferences of the children. The focus of the study was on the choice they make of each other and eventually of one of them as leader. He referred to those chosen as "leaders" and to those rejected as "isolates" or "near isolates."

Choice appears as an expression which is not only a response of attraction towards an individual but a response which may, in a sense, be considered "earned" by the person chosen. The isolates are individuals who in a community numbering about four and a half hundred persons do not actively "win" the attraction of any other members to them; conversely, the leaders are individuals who in the
same community are eminently successful in "winning" the attraction of other members to them (p. 165).

One of the important characteristics of leaders that Jennings found was insight. "The universal characteristic of the leaders in this study may be a 'logical' carrying out of their larger insight into the needs of persons generally and at least partially a reflection of greater emotional maturity on their part than appears to characterize the average member" (Jennings, 1943, p. 201). This insight was expressed in the form of sympathetic understanding of the development needs of others. Jacqueline, one of the subjects of the case studies conducted by Jennings, was shown to have such an understanding.

Sympathetic and "objective," unusually astute in human contacts, ingenious, resourceful and appreciative of talent, Jacqueline appears as a person who is an artist in stimulating the development of others, fostering their welfare, and interpreting their unexpressed needs to other persons (p. 195).

This indicates that leadership and isolation depend upon the specific social milieu in which they are produced.

Individuals who in this community appear as leaders may or may not be found to be leaders in another community of which they later become a part; likewise individuals who in this community appear as isolates may or may not be found in another community later to also remain isolates (Jennings, 1943, p. 204).
Since leadership ability seems to change with respect to given situations, must it then not be assumed that leadership itself is entirely incidental, haphazard and unpredictable? Jennings disagrees with such assumption. He says that there are certain characteristics that have become so much a part of the personalities of the leader and the isolate that in general these two kinds of people tend to remain what they are.

Nevertheless, it would appear that there are certain qualities in the personalities of the leaders which once these have become an integral part of the individual's personality pattern (such a quality as freedom from self-concern sufficient to enable him to be concerned with matters affecting many others than himself) are likely to remain since they reflect a high level of emotional growth and maturity and thus may be expected to act favourably upon his future relationships with persons in other groups. Similarly, it would appear that certain qualities in the personalities of the isolates (such a quality as inability to observe and orient one's self to the elements of a situation and the persons comprising it) unless outgrown may continue to act unfavorably upon the individual's future relationships in other groups (Jennings, 1943, pp. 204-5).

After an analysis of several case studies Jennings further observed that traits alone cannot really determine leadership. The situation is important since it is in a specific setting that traits such as insight and emotional maturity can be meaningfully and effectively used. "The 'why' of leadership appears, however, not to reside in any personality trait considered singly, nor even in a constellation of related traits,
but in the inter-personal contribution of which the individual becomes capable in a specific setting eliciting such contribution from him" (p. 205). Here he is basically agreeing with the trait-situation interaction theorists.

One of the later studies done on traits was by Ghiselli (1963) on intelligence as a determinant of managerial success. Ghiselli shows that the relationship between intelligence scores and managerial tests is curvilinear, that is, the individual managers earning both low and high scores are less likely to achieve success in management positions than those with scores at intermediate levels. His study is not in agreement with those of Ghiselli (1955) and Harrell (1961) which describe the predictive power of intelligence tests in terms of a linear coefficient. Ghiselli contends that ordinary coefficients of correlation would not adequately describe the predictive power of intelligence tests. To determine the nature of the relationship he administered tests to three groups of men in middle management positions. The results show that subjects whose scores were low "have a low probability of achieving success as managers, and as test scores become higher the probability of achieving success becomes greater up to quite a high score level where the trend is
reversed" (p. 898). Ghiselli's study shows how the personal trait of intelligence affects the ability to succeed as a manager.

There are some serious problems with the trait approach to leadership. One of these, pointed out by Newstetter, Feldstein and Newcomb (1938), is that the complex of factors that determines an individual's status in a group is most difficult to isolate, measure and evaluate. The way the group accepts or rejects the individual is not based on the measurement of a particular trait or behavior but on the complex social situation. "Their treatment of him is, of course, in reaction to some or all of his behaviors, but we have been completely unsuccessful in attempting to measure what these behaviors are."

Bass (1981) also remarks that "a person does not become a leader by virtue of the possession of some combination of traits, but the pattern of personal characteristics of the leader must bear some relevant relationship to the characteristics, activities, and goals of the followers" (p. 66). In fact while the personal characteristics seem to be relatively stable the situations are characterized by changes—economic, social, organizational, etc.

The persistence of individual patterns of human behavior in the face of constant situational change
appears to be a primary obstacle encountered not only in the practice of leadership, but in the selection and placement of leaders. It is not especially difficult to find persons who are leaders. It is quite another matter to place these persons in different situations where they will be able to function as leaders. It becomes clear that an adequate analysis of leadership involves not only a study of leaders, but also of situations (Stogdill, 1981, p. 67).

Ackerson (1942) also presents a strong case against the trait theory. Many trait studies have as their objective the discovery of those traits whose presence make certain persons leaders and whose absence make others followers. Such studies seem to treat the concepts of "leader" and "follower" as opposites. In his study of inter-correlations among traits of boys and girls, Ackerson reports that "leader" and "follower" may not be opposite poles of a single underlying trait. It is possible that under certain circumstances an individual may be indifferent about becoming a leader.

It may be that the true antithesis of "leader" is not "follower," but "indifference," i.e., the incapacity or unwillingness either to lead or to follow. Thus it may be that the same individuals who under one situation are leaders may under other conditions take the role of follower, while the true "opposite" is represented by the child who neither leads nor follows (Ackerson, 1943, p. 45).

3. The Group Situation

The above criticisms point to the fact that the trait approach gives a one-sided description of leadership behavior. Since the present study is investigating many
aspects of the chairperson's behavior in different and complex academic-decision-making situations, an approach that merely deals with personal qualities cannot adequately describe the chairperson as leader. For an adequate description there is needed an approach that takes into consideration the activities of the chairperson within the group he leads. Leadership is not merely a matter of possessing a passive combination of traits but a working relationship among members of a group in a specific setting. To avoid the problems facing the trait theorists, the group situation theorists try to explain leadership in terms of situations or environmental factors such as the needs of the group, its goals, availability of resources and the problems that the group has to solve. According to Murphy (1941) "a fault of most leadership studies is emphasis upon the 'individual' rather than upon the individual as a factor in the social situation" (p. 674).

Leadership study calls for a situational approach; this is fundamentally sociological, not psychological. Leadership does not reside in a person. It is a function of the whole situation. The situation calls for certain types of action; the leader does not inject leadership but is the instrumental factor through which the situation is brought to a solution (Murphy 1941, p. 674).

Murphy claims that leadership is a process. "Process" refers to "the interplay of factors in a total situation" (p. 674). He states that groups secure leaders to help them act and leadership comes into being
when some individual meets the needs of the group. This individual introduces ideas and strategies which lead to the fulfillment of the group's needs. Components of leadership such as self-confidence, ascendency, knowledge, forcefulness, tone of voice, etc., vary indefinitely as the needs of the group vary indefinitely. The choice of leaders is dictated by group needs. Murphy gave several illustrations to prove this point. For example, a social group whose needs are conviviality and pleasant personalities will follow a lively and social person. Leadership is a fluid process that solves problems and fulfills needs. After that it creates new and more desirable situations. He thus defines leadership "as that element in a group situation which, when made conscious and controlling, brings about a new situation that is more satisfying to the group as a whole" (p. 677).

Bass and Barrett (1981) also explain effective leadership in terms of the requirements of the situation. They present evidence against the traditional view of the manager as someone who gets the work done in all situations through careful planning, directing and controlling workers. Such managers even use threat of punishment or promise of reward in order to get the job done. Contrary to this traditional view, Bass and
Barrett assert that in many situations employee participation in governance leads to the effective attainment of organizational goals.

But evidence has accumulated...that self-planning is more fruitful, that participative approaches often are more effective than directive leadership, and that self-regulated control is often more successful. Hence, many modern managers now see themselves as planning collectively and sharing the decision process through consultation with subordinates (p. 185).

Since the leadership demands change with situations, Bass and Barrett state that all approaches to leadership--trait, personality, situation, etc.--must be encouraged.

But we must emphasize that there is no one best way...Effective management may call for planning with others in some situations and planning for others in other situations; being directive at times, and participative at other times, imposing arbitrary controls in some circumstances and emphasizing self-regulation in others. What seems least effective is for managers to do nothing, to abdicate leadership responsibilities, to play laissez-faire roles, shuffling papers behind closed doors and remaining unavailable for consultation (pp. 185-186).

Bass and Barrett describe two kinds of supervisors to be found in most situations: considerate (participative) and directive (initiating). Considerate supervisors tend to emphasize concern for the opinion of their subordinates on matters of importance and are willing to share their power with them. Consideration and participation are not identical but are correlated. Improved human and interpersonal relations such as open
communication and regular group meetings seem to be the consequence of the participative approach. When supervisors are directing and initiating, they do all the planning and they control the organization as they see fit. Maintenance of standards, meeting of deadlines and production quotas seem to be their main concern. Bass and Barrett state that some situations demand consideration, some direction and others demand both. It all depends upon the needs of the organization and the problems to be solved.

Stogdill and Coons (1957) developed two widely used instruments for the measurement of Consideration and Initiation: the Leader Behavior Description Questionnaire (LBDQ) and the Leader Opinion Questionnaire (LOQ). They assembled a pool of 1970 items that describe all possible supervisory behavior. The research consisted of subordinate ratings of supervisors in industry, business, the military and in educational organizations. Several factor analyses of the items eventually yielded the two important factors of consideration and initiation.

Bass, Farrow, Valendzi and Solomon (1975) did a study of how the use of five management styles—directive, negotiative, consultative, participative and delegative—is related to aspects of a system of inputs, transforms and outputs and is represented by
organizational, task, intrapersonal, and interpersonal variables, as well as measures of work-unit effectiveness and satisfaction. Bass et al. say that to understand supervisor behavior in each situation, the different management styles must be distinguished.

For us, a satisfactory and compelling level of understanding of how a supervisor behaves is not achieved until his consultative behavior has been distinguished from his participative and delegative behaviors, and until his directive behavior has been separated from his negotiative (persuasive, haggling, and manipulative) tendencies. Thus, for example, we ultimately hope to show that in some situations where consultation is effective, participation may be counterproductive and vice versa (1975, p. 720).

In order to find out under what situations and conditions particular management styles are most frequently seen, Bass et al. correlated the five management styles with the above situational variables. The Profile was completed by 78 managers and 407 of their subordinates. The results of this study show which management style is effective and frequently used in certain situations. The following is a summary of the conclusions drawn from the study: (1) Managers in situations where open discourse, reciprocal openness and interpersonal relations are needed for effective management more frequently employ consultative, participative and delegative styles. Participation was conceptually independent of consultation but correlated highly with
These styles are aspects of relations-oriented leadership, that is, leadership that emphasized human and friendly relations as well as organizational warmth. The subordinates of such leaders tend to report higher job satisfaction.

Reported frequency of consultation, participation, and delegation coincided with higher job satisfaction and more informed and fair-minded subordinates (1975, p. 726).

(2) Managers that are task-oriented, that is, those who express strong concern for production, group goals and the means to achieve them, very frequently employ directive styles.

Direction was...seen as more frequent when constraints were tight, when tasks were routine with little discretionary opportunity, when subordinates were authoritarian, and when within-system relations were highly structured (p. 726).

(3) Managers in situations with complex tasks and long-term objectives employ more frequently delegative styles.

Delegation was seen as more frequent if tasks were complex and not routine, were managerial in character, and provided considerable discretionary opportunities (p. 726).

These results show that management styles can be explained in terms of work situations. Other researchers are in agreement with the general finding of Bass et al. (1975) that relations-oriented management styles such as consultation, participation and delegation coincide highly
with employee job satisfaction. Fleishman (1973), and Kerr and Schriesheim (1974) found consideration to be highly correlated with subordinate job satisfaction.

Like the trait approach, the situational approach explains leadership in terms of the effect of a single set of forces—the situational forces. It holds that it is the situation that determines not only the role of the leader but also the kind of leader that should manage the group. This particular approach ignores the role of the personality of leaders. The main problem then, of both trait and situation approaches is that they overlook the interactive effect of trait and situational factors. Many researchers have observed that leadership in organizations cannot be adequately explained in terms of only one set of forces. Thus they hold that it is the interactive effect of both kinds of forces that is vital to effective leadership. Some of these researchers believe that the debate between the trait and situation theorists is not about an important problem. Bass (1960) argues that the great man (trait) versus environment (situation) controversy is a pseudo-problem since for any given case some of the variance in what occurs is due to the situation, some is due to the individual, and some to the interaction of individual and situation.

As with groups versus individuals, we are dealing with a pseudoproblem. Suppose we repeatedly assess
the leadership behavior of members of the same groups of five subjects each in a variety of situations: intellectual, mechanical, discussion. Ignoring the group effects we again have several sources of variance into which the total variation in leadership behavior among the individuals studied can be apportioned. One source is the variance in behavior of the individual members across the three situations combined. A second source is the variance of all individuals combined from one situation to another. A third source of variance is the interaction between individual and situation: the difference in fluctuation of individuals from one situation to another (1960, p. 17).

4. The Interaction of Traits and Situations

Case (1933), a trait-situation interaction theorist, hypothesized that the three factors that determine leadership are (1) the personality traits of the leader, (2) the social situation, and (3) the event, that is, the problem to be solved.

The present hypothesis is that the conjecture or falling together, of personality traits, social situation, and event determines leadership from hour to hour in the relations of obscure persons, and from time to time in the affairs of the world (p. 513).

La Piere (1938) holds the view that any theory of leadership must contain not only elements about persons as well as elements about situations but also must take into account the interaction between the individual and the situation. He states that the factors present in the organizational situation determine to a large extent the leadership qualities needed. "It is evident that the extent to which it is possible for any leader to influence
the course of an interaction is determined by the factors present in the particular situation" (p. 33). In any social interaction there are factors that put constraints on all individuals, including the leader. Even in situations where the leader himself is a very significant factor, he is only one of the many factors. This interplay of personal-situational factors follows a definite pattern and the leader interacts with his followers rather than merely dominating them. The leader of the interaction is himself a part of the pattern. He is affected by the behavior of his followers. The leader, in other words, interacts with his followers.

Gibb (1947) argues that the three most important principles of leadership are:

First, that leadership is always relative to the situation—relative, that is, in two senses: (a) that leadership flourishes only in a problem situation and (b) that the nature of the leadership role is determined by the goal of the group; and this is, in fact, the second principle of leadership, that it is always toward some objective goal. The third principle is that leadership is a process of mutual stimulation—a social interactional phenomenon in which the attitudes, ideals, and aspirations of the followers play as important a determining role as do the individuality and personality of the leader (p. 272).

Gibb describes how these principles were exemplified in techniques for the selection of military leaders in Britain and in Australia in the 1940s. The methods employed were (a) psychometric, (b) the clinical interview,
and (c) observation of behavior in quasi-real life situations. Military boards selected the subjects based on training results. The selected subjects were then rated on traits that affect leadership choice in the leadership situation. Among these traits were intelligence, socio-economic status, self-confidence, aggressiveness, adjustability and sociability. The ratings for leadership were correlated with ratings of the military selection board. A significant level exceeding the .001 and an estimated Pearsonian $r$ of .50 was obtained. The moderately high correlation shows that the earlier military training based on person-situation interaction later helped the selected subjects to obtain high leadership scores under conditions that require such interaction.

Those individuals chosen by a selection authority as having leadership capacity have superior intelligence, are superior in other mental abilities, are better educated, have more experience of leadership in situations similar to that for which the choice is made, have a relatively superior socio-economic status, have such personality traits as sociability, self-confidence, and adjustability which contribute to the ease of their socio-interactional behavior (p. 283).

Brown (1936) proposed five field-dynamical laws of leadership based on personality-situational interaction:

(1) "The successful leader must have membership-character in the group he is attempting to lead" (p. 342). This means that "the individual has the pattern of
attitudes and reaction tendencies common to the group" (p. 342). (2) "The leader must represent a region of high potential in the social field" (p. 344). Having high potential means that the leader represents the ideals, aims and attitudes of the group but the group must regard him as their superior and he must be above them. (3) The leader must realize the existing field-structure and must adapt to it before he can be successful. The power of the leader depends on the field structure. (4) "Leadership increases in potency at the cost of decrease in freedom of leadership" (p. 345). When the leader is very potent, that is, when he increases his power, the group structure decreases his freedom. When the leader gains control over the social field, the social field has at the same time complete control over him. (5) "The really successful leader realizes the long-term trends in field structure" (p. 345). The leader must ensure that his principles are viable and acceptable so that he can be successful in the long-run.

These field-dynamical laws of leadership deal with the constantly changing underlying structure of the social field. Admired personal traits such as intelligence and sociability cannot dominate the field for long unless they fit into and interact favourably with the changing field structure.
The instrumentality theory (belonging to the interaction-expectation group of theories) is a theory that is also associated with the person-situation interaction theories. According to the instrumentality theory, people engage in activities if these activities are instrumental in providing them with some valued object or outcome. When deciding whether to spend time and energy on some activity the question often asked is: What's in it for me? The instrumentality theory puts emphasis on the process used by an individual in achieving some valued outcome. The path-goal theory, a work related version of the instrumentality theory, was presented by Georgopolous, Mahoney, and Jones (1957). The following is their "path-goal hypothesis."

If a worker sees high productivity as a path leading to the attainment of one or more of his personal goals, he will tend to be a high producer. Conversely, if he sees low productivity as a path to the achievement of his goals, he will tend to be a low producer (1957, p. 346).

Georgopolous and others found motivation and productivity to be the function of the goals which the individual sets for himself and the utility of work-related behavior in achieving those valued goals.

Many versions of the instrumentality theory have been proposed since the formulations of Georgopololous and others. One version of the instrumentality theory that is more relevant to the present study is that
developed by House (1971) because it explains the relationships between (a) the leader's clarification of the path and the success of subordinates and (b) the subordinates' perception of the path and the attainment of their career goals. According to House, the individual estimates the path instrumentality of his behavior for the attainment of certain work goals as well as the barriers to the attainment of those goals. He places subjective values on the intrinsic valence, that is, personal utilities or satisfactions, associated with the achievement of the work goal itself and the extrinsic valences such as increase in pay and promotions associated with the personal outcome that he accrues as a result of achieving the work goal (p. 232). He used the term "valence" in a sense similar to Vroom's use of it. According to Vroom, who developed the first version of the instrumentality theory, the term refers to "affective orientations toward particular outcomes" (1964, p. 15), that is, the strength of a person's preference for one outcome over the others. Valence refers to the anticipated value of an outcome or the anticipated satisfaction from an outcome. It does not refer to the actual value of a thing or to the satisfaction it provides. House (1971)
says that the behavior of the leader is directly relevant to the estimations of the worker because he can determine, at least in part, the follower's perception of the rewards available to him or her. For example, he can determine whether the work-goal accomplishment will be rewarded with pay or promotion. He can increase the follower's path instrumentality.

If he is consistent in his decision making with respect to recognizing and rewarding work-goal achievement, he will clarify the linkage between work-goal achievement and rewards. Thus if he consistently rewards achievement, this will most probably increase the subordinate's path instrumentality...for valent personal outcomes" (House, 1971, p. 323).

House developed and tested nine hypotheses drawn from his theory. Some of the variables were leader consideration, initiating structure, closeness of supervision, hierarchical influence and authoritarianism. The findings of the studies generally supported his theory. The study shows how the behavior of the leader, as it initiates structure, for example, interacts with workers' expectations and goals in the work situation. Effective leadership is explained in terms of such interaction.

Hammer and Dachler (1975) conducted a study to test some of the main propositions of path-goal theorists such as Evans (1970) and House (1971). The latter predicted that highly structured leaders would have
subordinates who clearly perceive path-goal relationships. The path-goal theory directs the leader to take certain actions such as organize the structure in such a way as to help subordinates clarify paths to valued goals and expectancies of achieving those goals. On testing the effect of supervisor-imposed structure on employee perceptions within a path-goal approach to employee motivations, Hammer and Dachler found that

Contrary to the hypothesis advanced by Evans (1970) and House (1971) that leader structure has an effect on employee path-goal perceptions, agreement on path-goal perception between supervisor and subordinates, as well as among subordinates was positively related to Consideration and negatively related to Structure (Hammer and Dachler, 1975, p. 60).

The subordinates of leaders high on initiating structure saw the path-goal instrumentalities less clearly than subordinates with low structure. Subordinates with leaders high on consideration saw the path-goal instrumentalities quite clearly. One reason the researchers gave for the negative result is that the main terms used in the theory were vague and not well-defined.

As long as we have vague definitions and incomplete knowledge about the psychological properties of the variables we are measuring (such as Consideration, Structure, path, and goal) we lack the basis for deriving hypotheses which specify the linkages explaining the causal relationships between these phenomena, (p. 71).
Hammer and Dachler suggested that these vague terms be replaced by better defined terms such as valencies, expectancies and instrumentalities of Vroom's (1964) theory of motivation. They argued that the vague behavioral variables of consideration and initiating structure could be replaced by more specific leader behaviors which affect the valence and expectancy of the subordinates (1975, p. 73).

The studies of trait-interaction theorists are much more effective in describing leadership behavior since they take into consideration both the personal characteristics of leaders and the different situations in which they make decisions. The present research takes into consideration both the personal characteristics of the chairperson and the situations in which he manages faculty affairs.

5. Implications of the Three Leadership Approaches for This Study

The idea that leaders are great men that control society by means of unique traits (James, 1980) does not seem to be descriptive of the way departmental chairpersons should lead the faculty. Departmental management requires consultation with faculty members and consideration of their views. Ruling by virtue of possessing outstanding qualities may lead to the neglect of the
views of the faculty. Heimler (1967) states that authoritarianism can lead to serious conflicts between the chairperson and the faculty.

The qualifications for a successful college departmental chairman may also be expressed in terms of what he should not be. Within the framework of a large college in which policy-making decisions and operational procedures are delegated to the faculty, it is likely that the tenure of an autocratic, authoritarian chairman will be relatively short. In time his faculty will bring him down (Heimler, 1967, p. 161).

Successful departmental management depends upon the cooperation of the faculty. Therefore the trait approach to leadership does not seem to offer an adequate description of departmental operations.

The situation theorists, like the trait theorists, would also have a difficult time describing the leadership behavior of the chairperson. They believe that "the emergence of a great leader is a result of time, place and circumstance" (Bass, 1981, p. 27). Bogardus (1918) states that the nature of the group and its problems are determined by the type of leadership a group develops. Thus, for the situation theorist, it is the situation that dictates the course of action the leader should take. This view cannot adequately describe faculty-chairperson relationships because the situational factors that exist in departmental management are complex and cannot unambiguously indicate the course of action that would produce a solution. An example of a complex situational
factor in departmental leadership is the dual position of the chairperson as teacher and administrator. Whenever a teacher-administrator role conflict occurs a certain kind of personality is needed to understand the problem and interact with the appropriate constituents before coming up with a solution.

The most important joint appointment is actually the department or division chairman. The chairman is clearly both in the faculty and in the administration. As the well-known man-in-the-middle, he must understand the point of view of each of the two camps and learn to tolerate and reconcile conflicting pressures. Much conflict-reduction comes out of his hide (Clark, 1961, p. 297).

Personal qualities such as insight, knowledge, originality and responsibility discussed by Bass (1981) seem to be the type of qualities needed to solve problems associated with joint appointment. So both situational factors and personal qualities are needed to solve departmental problems.

This study therefore uses the trait-situation interaction approach. Gibb's (1947) principle of leadership, for example, is descriptive of faculty-chairperson interactions because he regards trait-situation interactions as a process of mutual stimulation--"a social interactional phenomenon in which the attitudes, ideals, and aspirations of the followers play as important a determining role as do the individuality and personality of the leader" (p. 272). Heimler (1967) states that the
effectiveness of the chairperson depends upon his willingness to welcome faculty participation in management.

His effectiveness is related to his ability to work cooperatively with the faculty in developing the department's program, to chair departmental meetings, to speak forcefully with knowledge and understanding in support of his ideas, and to further the department's objectives through the administrative and policy-making machinery of the college (pp. 159-160).

In their research into leadership styles of high school principals, Blumberg and Greenfield (1980) showed that good leadership involves the successful interaction of traits and situations. They state that one approach to understanding the principalship is studying its history, structure and function. However, this is not enough because what is missing from such discussion "is the feel for the individual" (p. 46), that is, "the human and seemingly idiosyncratic part of the enterprise--being a school principal, in particular being one who has been judged out of the ordinary" (p. 46). In their interview of principals they observed the following eight different leadership styles: (1) the organizer--this principal solved problems as they occurred. She recognized the needs and problems of people and provided the means for their solution; (2) the value-based juggler--this principal continually used his value system as a guide for decision-making;
(3) the authentic helper—one who tried to be natural and genuine as he managed the school. He expressed anger, happiness, frustration or warmth when the occasion for each emotion arose; (4) the broker or service man—one who got things moving and once they started to make progress he kept aloof and got involved from time to time when needed. He was tolerant but persistent and took strong stands on specific issues; (5) the humanist—a "people-oriented" individual who tried to maintain a balance between different forces while at the same time creating a definite sense of direction; (6) the organizational catalyst who "stirred the pot" in order to bring change. Her security came from her own confidence that she could bring unpredictable situations under control while at the same time organizing productive learning situations; (7) the rationalist—this principal thought that the system was a reasonable one and wanted to manage it rationally. Her strategy to make things work was to collect data and "then deal with people on the basis of what the data says, not on any preconceived notion about what ought to be" (p. 145); and (8) the politician—one who viewed school systems as socio-political systems. His concern was survival. He did this by taking as allies one or more of the political forces that influenced the school.
Although leadership in high school setting is different from that in college departmental setting, the personality types described by Blumberg and Greenfield can be found among departmental chairpersons. The important point raised by the two writers is that certain kinds of personalities are needed to successfully interact with certain kinds of situations. For example, the experiences of the principal who regarded herself as a rationalist were very unpleasant. She failed as an administrator because she tended to neglect situational variables such as the feelings and values of the community and the school.

There is no one leadership style that is ideal for all situations. Because there are a variety of situations, the chairperson's leadership style seems to change from situation to situation. "Academic departments are all different and operate differently at times. A chairperson may successfully use one leadership style at one time, while at another time another style might be more effective" (Roach, 1976, p. 14).

The literature review shows that the trait-situation interaction theory of leadership offers a better description of departmental management than the trait and situation theories. This study therefore employs the trait-situation interaction approach in
examining faculty perceptions of the ideal and real leadership behavior of the chairperson.

C. JOB SATISFACTION AND WORK VALUES

1. Introduction

In this review the variable of job satisfaction is dealt with both conceptually and operationally. According to Locke (1976) the usual operational definition of the concept as "job satisfaction is whatever my (arbitrarily chosen) measure of it measures" (p. 1300) evades the following basic question about job satisfaction: What is it that you are measuring when you measure job satisfaction?" There is a particular phenomenon referred to as "satisfaction" which needs to be conceptually identified before it can be measured. Every measurement operation presupposes some conceptual definition of the phenomenon. Without such presupposition of explicit or implicit definition the researcher would not defend his measure as measuring what he set out to measure. In conceptually defining the term Locke regards it as an emotional response: "Job satisfaction may be defined...as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1300).

The point raised by Locke is crucial in the understanding of job satisfaction because there are many
other emotional states that are not job-related but can be confounded with, and measured as, job satisfaction. Landy and Trumbo (1980) conceptually identify job satisfaction as the emotional state specifically related to aspects of one's job.

There are other things that affect the emotional state of the individual in addition to job-related stimuli, but that portion of the variance on the emotional continuum that can be accounted for through work-related stimuli is thought to represent job satisfaction/dissatisfaction (p. 388).

There are, however, two other work-related stimuli that are related to, but distinguishable from, job satisfaction. These are morale and job involvement. Viteles (1953) cites the following definition of morale:

Morale is an attitude of satisfaction with, desire to continue in, and willingness to strive for the goals of a particular group or organization (p. 284).

Locke (1976) points out two differences between morale and job satisfaction.

First, morale is more future-oriented, while satisfaction is more present and past-oriented; and second, morale often has a group referent (based on a sense of common purpose and the belief that group goals can be attained and are compatible with individual goals), while satisfaction typically refers to the appraisal made by a single individual of his job situation (p. 1300).

Job involvement consists in the attitude of taking one's job very seriously.

A person who is involved in his job is one who takes it seriously, for whom important values are at stake in the job, whose moods and feelings are
significantly affected by his job experiences and who is mentally preoccupied with his job (p. 1301).

Thus, a person who is highly involved in his job should be more likely to feel extremely satisfied or extremely dissatisfied with it (depending upon his degree of success), while an uninvolved person would have less extreme emotional reactions to the same or analogous job experiences (Locke, p. 1301).

Theories of job satisfaction have been classified either as process or content (Campbell 1970, Locke 1976). Locke regards process theories as causal models. Such theories "attempt to specify the types or classes of variables (needs, values, expectancies, etc.) considered causally relevant, as well as how these variables combine to determine overall job satisfaction" (p. 1302). These theories aim at an objective explanation of how behavior is initiated, directed, sustained and stopped. The variables mentioned by Locke play important roles in such an explanation. The major types of process theories are expectancy theories, need-satisfaction and value-satisfaction theories. Content theories aim at discovering the specific things within individuals that initiate, direct, sustain and stop behavior. They "attempt to specify the particular needs that must be satisfied or the values that must be attained for an individual to be satisfied with his job"
Two major content theories are Maslow's Need Hierarchy theory and Herzberg's Motivator-Hygiene theory. Both content and process theories will be dealt with in some detail.

2. Process Theories
   a. Expectancy Theories

   According to expectancy theorists, job satisfaction depends upon the degree of discrepancy between what an employee attains and what he expects to gain (Ilgen, 1971; McClelland, Atkinson, Clark and Lowell, 1953; Spector, 1956). They hold that satisfaction is attained when there is a match between expected and obtained rewards.

   Ilgen (1971) holds the view that job satisfaction depends upon the cognitive comparison of some property in the work environment to an internal standard such as one's expectations. He distinguished between two general definitions of expectations given by psychologists and adopted the one that reflects the above view.

   The first definition focusses upon the expectation that a specific behavior (an act) will be followed by the attainment or nonattainment of a particular outcome. Expectations are defined as an individual's subjective probability that an act will be followed by a particular outcome" (p. 345).

   While the first definition is limited to expectations about the consequences of specific behaviors, the second definition focuses on the individual's frame of reference
or level at which he compares the stimulus object or social situation with his individual standard.

The second definition is not limited to expectations about the consequences of behaviors. In this case, expectations are defined by the individual's subjective probability that a given state either does or will exist. Expectations about the nature of stimulus object, the social situation, or some state of the individual have been considered as (or part of) an individual's comparison level (Thibaut and Kelly, 1959), adaptation level (Helson, 1959), or frame of reference (Smith, Kendall, and Hulin, 1969). (Ilgen, 1971, pp. 345-46).

Ilgen and the above authors used the second definition. He was concerned about how satisfaction is related with the cognitive comparison of environmental factors and the individual's expectations. The two theoretical positions on this relationship are what he refers to as the "inverted-U relationship" and the "monotonic relationship." The inverted-U position is that "a person is most satisfied when events in his environment are very similar to or equal to what he expects. If the individual receives either less or more of the same stimulus object than he expects, he should be less satisfied than if he receives the same amount as he expects...Satisfaction should be lowest when the individual perceives the events in the environment as very discrepant from his standard, either very much below or very much above, and should be highest when the events concur with his standard" (p. 346). Field
studies by Patchen (1961) and laboratory studies by Aronson and Carlsmith (1962); Aronson, Carlsmith, and Darley (1963); and Carlsmith and Aronson (1963) support this theory. Ilgen holds the monotonic view. According to this view "satisfaction is a monotonic function of the algebraic discrepancy between an individual's standard of comparison and the amount of some quantity perceived to be present in the environment. If the individual receives less than his standard of comparison, he should be less satisfied than if his return is very similar to his standard. Likewise, if he experiences more than his standard of comparison, he should be more satisfied than if he experiences the same" (p. 346). Field studies by Foa (1957); Hulin and Smith (1965); Klein and Maher (1966); Smith, Kendall and Hulin (1969); and laboratory studies by Harvey and Klapp (1965), Vernis, Bandsma, and Cofer (1968) support this theory.

The study involving 225 male undergraduate students at the University of Illinois was to test whether the inverted-U function or the monotonic function better described the relationship between expectations and the individual's frame of reference or comparison level. The second purpose was to investigate the effect of the algebraic difference between expectations and experience on performance satisfaction while taking
into consideration group norms and initial level of expectations of the individuals. The first finding of the study shows that performance satisfaction was described better as a monotonic function of the algebraic discrepancy between expected and experienced performance than as an inverted-U function. The second finding is that in addition to basing their satisfaction with performance upon the comparison of experienced performance with expected performance, the subjects also compared experienced performance with the initial level of expectation of their norm group. The importance of the effect of initial level of expectation of the findings is explained by Ilgen.

For example, subjects whose performance increased from the fiftieth to sixtieth percentile may have been less satisfied than those whose performance went from the seventieth to the eightieth percentile because the eightieth percentile represented better performance than the sixtieth in terms of norms. Therefore, a comparison of their own performance to that of the norm group would be less satisfying for the former than the latter group (p. 357).

Aronson and Carlsmith (1962) reported a nonmonotonic relationship between satisfaction and the algebraic difference between expected performance and reported performance. Ilgen found that satisfaction is also a function of the level of expected performance and deviations from expected performance. But Aronson and Carlsmith found that subjects were most satisfied when
their performance was the same as expected regardless of whether expected performance was low or high. They experimentally manipulated performance so as to establish high or low levels of expected performance but failed to find that satisfaction is a function of the level of expected performance.

Spector (1956) tested four hypotheses to find out the manner in which expectations and fulfillment are related to satisfactions. The experiment involved 36 groups of four army men each. These subjects were to expect to be promoted from corporal to seargeant. The status and important aspects of the new job were emphasized to ensure that the promotion was attractive to the subjects.

Hypothesis I, which he referred to as the frustration hypothesis, deals with cases in which a person failed to achieve an attractive goal and hypothesis II, the gratification hypothesis, deals with cases in which one succeeded in achieving an attractive goal. The level of morale (high or low) depended upon the individual's perception of his probability of achieving the goal.

Hypothesis I. On failing to achieve an attractive goal, an individual's morale will be higher if the probability of achieving that goal had been perceived to be low than if it had been perceived to be high (p. 52).

Hypothesis II. On achieving an attractive goal, an individual's morale will be higher if the probability of achieving that goal had been perceived to be low than if it had been perceived to be high (p. 52).
Both hypotheses were supported by the study. The third hypothesis, the expectation hypothesis, of which hypotheses 1 and 2 are sub-hypotheses, suggests that whether or not the individual succeeds in achieving his goal, his morale will be partly determined by his perceived probability of successful achievement.

Hypothesis III. On succeeding, or failing, to achieve an attractive goal, an individual's morale will be higher if the probability of achieving that goal had been perceived to be low than if it had been perceived to be high (p. 52).

The finding also supported this hypothesis. The fourth hypothesis, the fulfillment hypothesis, suggests that achieving an attractive goal would result in higher morale than failing to achieve that goal:

Hypothesis IV. For all given perceived probabilities of achieving an attractive goal, an individual's morale will be higher if he achieves that goal than if he fails to achieve it (p. 52).

Hypothesis IV was very strongly supported. In general, the studies show that a person's satisfaction with his state of affairs is partly a function of the degree to which he is certain that the perceived outcome will be achieved.

Morale does not appear to be adversely affected by failure to achieve an attractive goal if the person's expectations of achieving the goal were low. Low expectations seem to act as a buffer to morale when an attractive event does not come to pass (p. 55).

The finding from a study by Grebhard (1949) on the effect of expectations on subjects before performance is
consistent with Spector's finding. However, the findings of Filer (1952) and Klass (1952) are not consistent with Spector's results. The study of Filer on satisfaction and other factors affecting the attractiveness of goal objects supported only the gratification hypothesis. Filer attributes his own rejection of those hypotheses involving expectations to the fact that his instructions did not create differential expectations in his subjects. The study of Klass (1952) on the role of expectations in determining intrinsic job satisfaction supported only the frustration hypothesis. Spector (1953) suggests that Klass' failure to support the gratification hypothesis was due to the use of a "weak" fulfillment variable.

The present study does not base satisfaction specifically on the expectations of the faculty but expectations and work values are related. DeVries (1975) says that the assessment of faculty self-expectations is one way of finding out what faculty members value in departmental operations. With regard to the way satisfaction is related with the cognitive comparison of environmental factors, this study assumes the monotonic position. It assumes that if a faculty member perceives the chairperson as offering less than his standard of comparison, he should be less satisfied than if his return were very similar to his standard. Also, if he
perceives the chairperson as offering more than his standard of comparison, he should be more satisfied than if the chairperson offered something very similar to his standard.

b. Need-Satisfaction Theories

According to need-satisfaction theorists, it is the degree to which the job fulfills or allows the fulfillment of the individual's needs that determines his degree of job satisfaction (Lofquist and Dawis, 1969; Morse, 1953; Porter, 1961 and 1962; Schaffer, 1953; Wofford, 1971).

Lofquist and Dawis (1969) presented a Theory of Work Adjustment that is premised on the existence of a relatively stable work personality. According to them, the major sets of variables in the description of the work personality are the individual's abilities and his needs. They showed how the individual's needs and abilities develop and differentiate in the work environment until a point of relative stability is reached.

One of their propositions (Proposition III) explains the relationship between the individual's needs and his satisfaction.

Proposition III. Satisfaction is a function of the correspondence between the reinforcer system of the work environment and the individual's needs, provided that the individual's abilities correspond with the ability requirements of the work environment (p. 53).
Corollary IIIa. Knowledge of an individual's needs and of his satisfaction permits the determination of the effective reinforcer system of the work environment for the individual (p. 53).

Corollary IIIb. Knowledge of the reinforcer system of the work environment and of an individual's satisfaction permits the inference of an individual's needs (p. 53).

The basic assumption of the theory from which Proposition III is derived is that "each individual seeks to achieve and maintain correspondence with his environment" (p. 45). By "individual" and "environment" are meant respectively "work personality" and "work environment" (p. 47). Needs are one of the variables in the work environment and their relationship with the work personality can determine satisfaction. "Work personality-work environment correspondence...can be used to predict satisfactoriness and satisfaction" (p. 47). The Theory of Work Adjustment suggests that the degree of satisfaction depends upon the correspondence between the individual's needs, the potential of the job environment to fulfill those needs and the correspondence between the individual's abilities and the ability requirements of the work environment.

Lofquist and Dawis established a Work Adjustment Project to test their propositions. The data obtained from testing Propositions I, II, III and IV (the propositions tested by the time of publication of their book) support the Theory of Work Adjustment. To test
Proposition III, that is, to predict satisfaction from the correspondence between the individual's needs and the reinforcer system of the work environment, they administered questionnaires to different work groups such as laborers, nurses, packers, secretaries, etc. The obtained correlation scores were quite significant.

Morse (1953) suggests that the "level of satisfaction is a function of both the level of aspiration or need-tension level, and amount of return from the environment" (p. 112). "Aspiration or need-tension level" refers to what an individual wants from his job; "environmental return" refers to how much an individual receives from his job and this depends upon outside factors. For example, the opportunity to develop and use certain skills and to perform certain tasks is an important outside factor. Highly skilled jobs provide opportunity for the use of complex abilities. Such jobs provide high environmental return for those with needs to utilize complex skills. Routine jobs provide much less opportunity for the development and use of complex skills. Such jobs have low environmental return especially for high aspiring workers. Satisfaction derived from complex or routine environments depends upon the level of aspiration or need-tension of the individual. Thus Morse hypothesizes that:
Satisfaction depends basically upon what an individual wants from the world, and what he gets. The least satisfied person is the one that wants a great deal and gets very little. The most satisfied, is the one who wants a great deal and gets it. Other combinations of 'wants' and 'gets' fall in-between the two poles (p. 4).

To test the hypothesis she developed a questionnaire divided into four indices: (a) intrinsic job satisfaction, (b) company involvement, (c) financial aid and job status and, (3) pride-in-group-performance. The instrument was completed by 742 clerical workers and 73 line supervisors.

The study was primarily concerned about what the level of satisfaction itself determines. It showed that the level of satisfaction determines the willingness of the individual to stay in the organization. Those shown to be satisfied in the above four areas were less likely to leave their job. However, two factors determine whether they will actually stay or leave: (1) the ease with which they will get another job; (2) the internal organization of the company. If the organization is such that he will never be satisfied, he may leave. Although the findings confirmed the view that satisfaction is a function of both the strength of needs in a particular area and the amount of environmental return, the individual's strength of desires or amount of return he receives were not directly measured. The following
are two important findings on the relationship between the need of high skills and satisfaction.

(1) The need for skilled, varied work is quite widespread in the white-collar population and those who are doing highly routine work will tend to be less satisfied with their jobs than those doing skilled, varied work.

(2) The need for pay and job status increases as the employee grows older. This growing need, if not adequately fulfilled, leads to a discrepancy between the level the individual aspires for in the hierarchy and where he is. This, of course, leads to dissatisfaction (p. 164).

The study also tested the relationship between satisfaction and productivity. The results suggest that satisfaction with one's job, one's pay and status, and with the organization does not directly lead to high productivity. Those who are the most satisfied on the job are not necessarily the most producers. The guess is that productivity can only increase if the strength of the needs of the individual cannot be satisfied through any other means except through high production and if there exists no alternative paths for need-satisfaction.

Porter (1961) conducted a study on the satisfaction of psychological needs of managers in bottom and middle management positions. His study is unlike many studies on management which concentrate on the technical aspects of the job, for example, the list of duties, responsibilities, functions and personality traits. Porter claims that although in many cases managers are promoted
on the basis of how well they adjust to psychological aspects of the job such as motivation and coping with pressures, their performance is judged on the basis of visible or evident technical performance. He suggests that both the psychological and technical aspects are important to good management. His study throws light on how some managers can be technically qualified for particular jobs but fail to fit the psychological nature of the job. His goal was to determine which psychological needs are more likely to be satisfied in bottom and middle management jobs.

The categories and hierarchical arrangement of needs used by Porter are based on Maslow's (1954) categories of needs. There were two deviations from Maslow's system. The first is that he left out the physiological needs since it is assumed that these needs are adequately satisfied for managerial persons. Another deviation is that he added the category of autonomy. The categories of his study were: security needs, social needs, esteem needs, autonomy needs and self-actualization needs. For each of the fifteen items under these categories the subjects were asked to answer the following three questions (p. 3) by circling a number on a rating scale from 1 to 7, where 7 represented the maximum amount:

(a) How much of the characteristics is there now connected with your management position?
(b) How much of the characteristic do you think should be connected with your management position? (c) How important is this position characteristic to you?

After the analysis of data Porter reported that bottom-management positions were more likely to produce deficiencies in fulfillment of psychological needs in the areas of security, esteem and autonomy than were middle management positions. This suggests that middle managers have more opportunity to satisfy needs than the lower-level managers. But in the highest-order need areas of self-actualization, middle management was almost as dissatisfied as bottom management. The highest order-need area—self-actualization—and the lower-order need area—security—were regarded as more important areas of need satisfaction than the areas of social, esteem and autonomy by individuals in both bottom- and middle-management positions.

Porter (1962) did a similar study based on a much larger sample (nearly 2,000 subjects). This study, which concerned the perceived deficiencies in need fulfillment as a function of job level, confirmed the results of the above study of Porter (1961). In addition, it found consistent decreases in need fulfillment deficiencies between bottom management and the level immediately above it. Unlike in the first study where the decreases in deficiency occurred only in the bottom and middle
management levels, in the second expanded study, the decreases continued up to the very top management levels. The results of the second study showed that "(a) vertical level of position within management had a strong relation to the degree of perceived satisfaction of the three highest-order needs—Self-actualization, Autonomy, and Esteem; for these needs, satisfactions increased at each higher level of management. (b) For the two lower-level types of needs—Security and Social—there were no systematic changes in satisfaction in relation to management level. (c) Among the five need categories, Self-actualization and Autonomy were consistently regarded as the least fulfilled needs of all levels of management" (p. 375). One difference between the two studies is that the first one indicated a trend of decreasing deficiency within the security need area, whereas the second study did not find such a trend in the security area. In the second study security needs seem to be equally satisfied at both levels. The second difference is that the first study showed no appreciable changes in need deficiencies between the two management levels for the self-actualization area whereas the second study indicated that deficiencies decreased with increasing levels of the hierarchy.

Schaffer (1953) attempted to study the relationship between job satisfaction and need satisfaction in the work
environment. He developed an instrument which could be used successfully to estimate job satisfaction from measures of need satisfaction and need strength. According to the theory on which his study is based, the amount of dissatisfaction generated in any job situation for any individual is determined by the strength of his needs and the extent to which he perceives job opportunities as satisfying those needs. The following is the formal statement of the theory:

Over-all job satisfaction will vary directly with the extent to which those needs of an individual which can be satisfied in a job are actually satisfied; the stronger the need, the more closely will job satisfaction depend on its fulfillment (p. 3).

Schaffer used six criteria to select twelve needs and designed a questionnaire to measure the following three variables: (a) the strength of each of the twelve needs; (b) the degree to which each of the twelve needs are being satisfied in the job; and (c) the individual's overall job satisfaction. The study showed that the most accurate prediction of overall job satisfaction can be made from the measure of the extent to which each person's strongest two or three needs are satisfied. The strongest needs, according to the self-ratings of the subjects, were those for creativity and challenge, mastery and achievement, and social welfare and the weakest were those for independence, socio-economic status, and dependence.
In his study of the motivational bases of job satisfaction and job performance, Wofford (1971) contended that

Job motivation is a function of the strength of the needs and the expectation on the part of the employee that job performance will result in need gratification (p. 502).

He defines job motivation as "...the tendency to perform or to expend the effort required to maintain a high quantity and quality of output" (p. 502). The phrase "expectation...that job performance would result in need gratification" refers "to the subjective probability on the part of the employee that the effort expended on the job will result in need fulfillment. This subjective probability is based on prior work experience. Consequently, a relationship will exist between one's expectancy and the level of gratification of his needs" (p. 502). Wofford defines "need strength" as "the degree of tendency to respond so as to attain fulfillment from the stimuli confronting the person" (p. 502). He developed the following categories of need in accord with the types of stimuli in the environment: security and maintenance, order and structure, personal interaction, achievement, personal enhancement, and group achievement. The first three categories are at the lower level and the other three are at the upper level of Maslow's hierarchical arrangement. He then
tested nine hypotheses dealing with these categories: four hypotheses on job satisfaction, two on job performance and three on the interaction of job satisfaction and job performance. The results of the study supported the expectancy theory of job satisfaction and job performance. The test of Hypothesis I which deals with the relationship between the degree of need gratification and of job satisfaction was supported. Employees whose needs are ungratified (that is, those who have a wide differential between need strength and need fulfillment) are significantly lower in job satisfaction than employees whose needs are gratified. The hypotheses on the relationships between (a) employee performance and expectancy of reward and, (b) employee performance and strength of needs, were supported. Job performance is found to be significantly correlated with the expectancy of reward and with need strength. Also, Hypothesis 7, which deals with the interaction of job satisfaction and job performance, was supported.

Wofford also tested Maslow's (1954) hypothesis that needs emerge to influence behavior in a hierarchical order of prepotency. Lower level needs must be gratified before upper level needs become significant as motivators of behavior. He stated the hypothesis (Hypothesis 2a) as follows:
Employees whose lower and upper level needs are gratified are significantly higher in job satisfaction than are those employees whose lower level needs are gratified but whose upper level needs are ungratified (Wofford, 1971, p. 503).

Maslow's prediction that upper level needs influence behavior when lower level needs are ungratified was supported after testing Hypothesis 2(a). But the following hypothesis, Hypothesis 2(b), fails to support Maslow:

Employees whose lower and upper level needs are ungratified are significantly lower in job satisfaction than are those employees whose lower needs are ungratified but whose upper level needs are gratified (Wofford, 1971, p. 503).

Hypothesis 2(b) is used to test Maslow's contention that upper level needs do not influence behavior until lower level needs are gratified. The results did not support Maslow. Each of the upper level need categories were found to be significantly related to job satisfaction for employees whose lower level needs were not gratified as well as for those whose lower level needs were gratified. In fact, in opposition to Maslow's theory the results show that upper level needs have a greater effect upon job satisfaction when lower level needs are not gratified than when they are gratified.

In the same studies Wofford tested the two-factor theory of Herzberg (1966). According to Herzberg job content elements such as responsibility, advancement,
recognition, achievement, growth opportunities and the work itself account for variance in job satisfaction and job motivation. The context elements such as company policy and administration, supervisory relationships, peer relationships, salary, and working conditions are determinants of job dissatisfaction. Job satisfaction and job dissatisfaction factors were held to be independent constructs. The two hypotheses constructed to test the Herzberg theory were not supported (p. 516).

Although there are many theories of need and many hypotheses have been developed to test these theories, certain fundamental questions about needs have not yet been satisfactorily answered. All need-satisfaction models assume that persons have needs but offer no proof that the list of needs which they propose are in fact needs. The models are more concerned with stating hypotheses about the relationship between needs, jobs and attitudes than with justifying the needs they propose.

The first problem with needs concerns their origin: are they instinctual, learned or both? Maslow (1970) suggests that virtually all needs are instinctual, need no justification and are thus to be regarded as basic human rights. What he refers to as "the instinctoid nature of basic needs" constitute for him:

The foundation of a system of intrinsic human values, human goods that validate themselves, that
are intrinsically good and desirable and that need no further justification. This is a hierarchy of values which are to be found in the very essence of human nature itself. These are not only wanted and desired by all human beings, but also needed in the sense that they are necessary to avoid illness and psychopathology. To say the same thing in another vocabulary, these basic needs and the metaneeds are also the intrinsic reinforcers, the unconditioned stimuli which can be used as a basis upon which can be erected all sorts of instrumental learnings and conditionings (Maslow, 1970, p. xiii).

But other theorists hold that most behavioral dispositions including needs are learned (Bandura, 1969 and McClelland, 1961). McClelland argues that needs are learned from a very young age and the need for achievement could be inculcated and made part of the economic development plan of a nation. He hypothesizes that "achievement motivation is in part responsible for economic growth" (1961, p. 36). He analyzed data on the preferences of boys for various occupations in five countries (p. 245) and tried to find out why boys with high achievement motive are more attracted to business occupations in the United States and Japan but not elsewhere. He considered such social and cultural factors as the class system, family occupation (the tendency for children to choose the careers of their parents) and the specific entrepreneurial qualities that make high achievers to aspire for positions of business leadership in certain countries. He discovered that the high achiever with entrepreneurial
qualities learns to meet his needs in special ways, one of which is the tendency to constantly think ahead.

The successful entrepreneur in these terms is by definition someone who considers more alternatives and their consequences before they actually happen to him. In more ordinary language, he anticipates future possibilities (1961, p. 237).

One problem with McClelland's view is that he did not distinguish between needs and cultural expectations for behavior, that is, he did not clearly draw a line between the specific needs of the achiever as a person and the role that society expects him to play. So it is difficult, for example, to tell whether the decision of the middle-class child to become a business owner is based on a personal need or whether it is the society that expects him to occupy such a position or one of comparable status.

This difficulty in distinguishing between learning a need and conforming with societal expectations leads to the second problem with needs, which is, the question of the mechanism by which needs are learned. If, for example, operant conditioning is used in the learning of needs, what the researcher does is to try to condition the behavior of the learner. The problem with this mechanism is that it is difficult to tell whether the acting of the behavior is equivalent to having the need or is merely an expression of some attitude.
According to theories of operant conditioning, for instance, it is behaviors that are conditioned. While one such behavior could be the expression of an attitude or some other affective statement, such learning involves the learning of a need or an attitude only to the extent one is willing to accept the idea that the expression of the statement or the acting of the behavior is equivalent to having the need (Salancik and Pfeffer, 1977, p. 442).

Thus there seems to be no independent criterion with respect to which the researcher can tell whether what is learned is the need or the behavior. He has to depend on the statements of the subjects.

Identifying needs is a serious problem for need-satisfaction theorists. If some needs are declared to be learned (McClelland) and some instinctual (Maslow), it is difficult to distinguish between acquired and inherent needs.

The third problem with the concept of needs is that the description of needs is usually ambiguous. Salancik and Pfeffer (1977) point out that although physiological needs of hunger and thirst are not only well defined but also have precise objects associated with their satisfaction, the higher level needs such as self-actualization lack such precision in definition.

Self-actualization is a concept so poorly articulated that there continue to be debates about its essential properties: Is it an ever increasing need or can it be satisfied like the lower-order needs? What is the precise distinction between self-actualization and esteem (competence) needs? Is self-actualization the most intrinsically controlled need? To the extent that needs are loosely defined, it becomes
difficult to do research that has any chance of refuting their applicability (1977, pp. 442-3).

Until needs are clearly defined researchers will find it difficult to justify what they are writing about or measuring. They will be more concerned with operational definitions of the concept of needs than its conceptual analysis and will be claiming that needs are whatever their instruments are measuring.

c. Value-Satisfaction Theories

Some theorists have argued that "it is the (perceived) job situation in relation to the individual's values that is the most direct determinant of job satisfaction" (Locke, 1976) p. 1304). An analysis of other possible determinants of job satisfaction such as needs and expectations leads Locke (1969) to contend that it is values that determine job satisfaction. In arguing against expectations as determinants of satisfaction, Locke suggests that promotions and raises, if valued, ordinarily produce pleasure whether they are expected or not. Dismissals and demotions, if disvalued, ordinarily produce displeasure whether they are expected or not. So it is that which is valued or disvalued that produces the satisfaction. Merely expecting something can hardly produce satisfaction. "What is expected...may or may not correspond to what is wanted. Conversely, what is wanted may or may not correspond to what is
expected" (pp. 320-21). It is possible that the value that brings the satisfaction can be confounded with expectation. "Empirically, values and expectations often coincide, because most people value only that which they have some reasonable chance of attaining. But when values and expectancies are separated experimentally, it is found that values rather than expectations determine satisfaction" (1969, p. 320).

What then is the experience produced by the discrepancy between what one gets and what one expects, if it is not satisfaction? Locke (1969) says the experience is only surprise. It is the value that accompanies the surprise that brings satisfaction (pleasant surprise) and dissatisfaction (unpleasant surprise).

If the outcome is in the direction of what one values ("better than expected"), it is a pleasant surprise. If the outcome is in the direction of what one disvalues ("worse than expected"), it is an unpleasant surprise (p. 320).

Locke admits that it is possible that expectancy as such can indirectly influence satisfaction. For example, a person can value or disvalue the experience of surprise itself thereby experiencing satisfaction or dissatisfaction (1969, p. 321). But this satisfaction is not directly based on the value of the surprise. One problem with valuing or disvaluing the experience of the
surprise itself is that it leads to fantasizing. It makes the person to begin to fantasize about what he expects will occur.

It is possible that expectancy as such could influence one's emotional reactions indirectly, however. When a person expects a pleasant event to occur, he often begins to anticipate the actual event and the pleasure it will bring, for example, by fantasizing or contemplating its consequences or by telling others about it. If the event then fails to come about, it may be more disvalued than if it had not been expected in the first place, perhaps due to the heightened contrast between the anticipated success and the failure which results. On the other hand, a person who expects failure in attaining some value may have time to erect defenses against it or to activate coping mechanisms that will lessen the disappointment (1976, p. 1303).

So Locke concludes that satisfaction derived from fantasizing is not based on values that one receives or honours.

In arguing against the view that needs are determinants of job satisfaction, Locke suggests that needs are "objective" in the sense that they exist whether or not we are aware of them. Biologically, needs are requirements for the maintenance of physical health and survival; and psychologically, they are requirements for a healthy consciousness (Locke, 1969, p. 320). Both are "objective" requirements of the well being of an organism. Man may not be aware of some of his needs although those needs may cause him discomfort. So he does not consciously desire to satisfy the needed object.
For example, man needed certain unknown vitamins which were discovered only after several hundred years of research. But man is aware of his values and actively seeks them.

A value is what a person consciously or subconsciously desires, wants, or seeks to attain. Thus, while needs are 'objective' in that they exist regardless of what the person wants, values are 'subjective' in the sense that they are 'in consciousness' (that is, they are standards in the person's conscious or subconscious mind). While needs are innate (inborn), values are acquired (learned). Thus, while all men have the same basic needs, men can (and do) differ in what they value. While his needs confront man with the requirements of action, his values determine his actual choices and emotional reactions (Locke, 1976, p. 1304).

Since man is not omniscient he can be mistaken about what is in his best interest and so fails to choose values that can promote his well being. Since it is values and not needs that "a man actually seeks to gain and/or keep or considers beneficial" (1969, p. 320), Locke concludes that it is values that properly determine his job satisfaction. He suggests that job satisfaction be measured with respect to the discrepancy between one's values and the degree to which one perceives one's job as fulfilling those values. To understand values a distinction must be made between the degree to which a person values some particular amount of an element and the amount of that element he prefers. Every value has two attributes: content and intensity. "The content
pertains to **what** the person wants to gain and/or keep; the intensity pertains to **how much** he wants to gain or keep" (p. 323). Locke's approach to assessing this relationship is to measure the discrepancy between the amount of the value the subject perceives to be getting and the amount he believes he should be getting. The algebraic difference between these two scores is correlated with the scores of the aspect of the job that is being assessed for satisfaction. Some researchers would base satisfaction on the discrepancy itself; but Locke prefers to correlate the discrepancy with satisfaction. He states that discrepancy-satisfaction correlations take into consideration individual differences in values since it measures the actual and ideal amount of the value for the individual. Further, this discrepancy-correlation method takes into account the nature of the value to be measured—its content (that is, what the subject actually wants) and its intensity (how much of it he wants). He claims that his method avoids measuring satisfaction by merely correlating an arbitrarily chosen measure of one element or variable with another arbitrarily chosen measure of it.

Brief and Aldag (1977) tested hypotheses concerning the degree to which the relationship between perception of leader behavior and subordinate job satisfaction is
affected by subordinate work values. The work values selected as moderators are job involvement and Protestant Work Ethic Ideals. "Job involvement" refers to the degree to which a person is "ego-involved," that is, preoccupied with his current job. "Adherance to Protestant Work Ethic ideals reflects the degree to which work in general is viewed as good, important, and central to one's life (1977, p, 100). An adherant to this ethic believes that hard work can bring about desired results in any job situation. The difference between the two values is that the degree of job involvement may vary from job to job while adherance to Protestant Work Ethics seems to be constant across jobs. The two dimensions of leader behavior are consideration and initiating structure (Fleishman, 1973). "Consideration involves leader behaviors associated with friendship, mutual trust, respect, and a certain warmth and rapport between the leader and his subordinates. Initiating structure involves leader behaviors associated with the organization and definition of relationships in the work group which tends to establish well-defined patterns and channels of communication and ways of getting the job done" (p. 99).

The results strongly support the hypothesis that perceived leader consideration is positively associated with general subordinate job satisfaction. But
initiating structure was shown to have only a minimal impact on satisfaction. The moderating effect of job involvement and adherence to Protestant Work Ethic ideals on the relationship between consideration and satisfaction was consistent with the expectation of the researchers. The relationship between consideration and satisfaction indices are stronger for those scoring low on the pro-Protestant Ethic scale than for those scoring high on that scale. Also the relationships between consideration and satisfaction indices are stronger for those with low job involvement than for those with high job involvement. But the moderating effects of job involvement and adherence to Protestant Work Ethic ideals on the relationships between initiating structure and satisfaction indices are complex. The Protestant Ethic ideals have opposite moderating effect on the relationship between initiating structure and the two satisfaction scales (general satisfaction and subordinate supervisory satisfaction). Brief and Aldag report that "while the relationship of initiating structure to general satisfaction is insignificantly higher for low Protestant Ethic individuals than for those high on that measure, moderating effects of adherence to Protestant Ethic ideals on the relationship of initiating structure to supervisory satisfaction are in the opposite direction" (pp. 106-108).
The debate over whether it is man's needs, or his values that properly determine job satisfaction is far from ending since there is growing literature backing each position. Each variable seems to be an integral part of work behavior and so cannot be explained away. Despite the problems with the description of the concept of need, the fact still remains that the needs of faculty members affect their satisfaction. Most of the literature reviewed on needs deal with the relationship between the strength of the individual's needs and the opportunity in the job environment for need fulfillment. His satisfaction depends upon the degree of his need strength and the opportunity the leader offers for need fulfillment. The different theorists use different variables and terminologies to express this basic idea. For example, Lofquist and Dawis (1969) suggest that satisfaction depends upon the correspondence between the individual's needs and the environment while Morse (1953) suggests that it depends on need-tension level and amount of return of benefits from the environment. In order words, the lesser the discrepancy between the strength of the needs of the individual and his perception of the leader or opportunities he offers in the job environment for the fulfillment of those needs, the greater the degree of job satisfaction.
The present study does not base job satisfaction specifically on needs but it uses methodologies similar to the ones used by need-satisfaction theorists such as Morse (1953) in deriving job satisfaction from leadership behavior and values. Moreover, there seems to be an interaction of needs and values in department operations. Carroll (1976) shows that faculty needs, values and expectations affect decisions made by chairpersons.

3. **Content Theories**

The second type of job satisfaction theories are content theories. The proponents of these theories (for example, Maslow, 1943, 1954, 1970; Herzberg et al., 1959) attempt to specify the needs of the individual that must be met before he can be satisfied with his job. According to Maslow (1970) people have five basic needs—physiological needs, safety and security needs, social needs, esteem needs and self-actualization or self-fulfillment needs—that are arranged in a hierarchy of prepotency. That is, the need at each level in the hierarchy is first satisfied before the one at the higher level is activated.

At once other (and higher) needs emerge and these, rather than physiological hungers, dominate the organism. And when these in turn are satisfied, again new (and still higher) needs emerge, and so on. This is what we mean by saying that the basic human needs are organized into a hierarchy of relative prepotency (Maslow, 1970, p. 38).
The unfulfilled need at the lower level is a deficiency in the individual that causes him some degree of discomfort. It is assumed that the individual would avoid activities that would increase the discomfort or dissatisfaction and engage in activities that would increase satisfaction. The following is the description of Maslow's five needs.

1. Physiological needs are basic needs or drives that are satisfied by such things as food, water and sleep (p. 36). These needs are the most prepotent. "What this means specifically is that in the human being who is missing every thing in life in an extreme fashion, it is most likely that the major motivation would be the physiological needs rather than any others (pp. 36-37).

2. Safety needs refer to the desire for a secure environment that is free of threats to one's existence (p. 39).

3. Social needs are belongingness and love needs. They deal with the individual's desire to be accepted by others (p. 43).

4. Esteem needs refer to the desire to be valued by others. These consist in the attainment of self-respect in society and in the desire to occupy a position of importance and admiration (p. 45).

5. Self-actualization needs refer to the desire for self-fulfillment. Man has several potentialities or capabilities, and so, he is constantly striving to fully realize as many of them as possible (p. 47).

Although these needs are arranged in a hierarchy of prepotency, each of them does not have to be completely satisfied before a new one emerges. The new one can emerge when the lower one is about 80 percent satisfied. So some lower needs do always co-exist with the higher
needs. When the individual reaches the ultimate level of self-actualization, the process of motivation does not end. It takes a new form—the more self-actualized the person becomes the greater the need for self-actualization. New forms of discontent will continue until he becomes what he is supposed to be. Thus the self-actualization need feeds on itself.

Even if all these needs are satisfied, we may still often (if not always) expect that a new discontent and restlessness will soon develop, unless the individual is doing what he, individually, is fitted for. A musician must make music, an artist must paint, a poet must write, if he is to be ultimately at peace with himself. What a man can be, he must be. He must be true to his own nature (Maslow, 1970, p. 46).

The studies of Porter (1961 and 1962) discussed above support Maslow's contention that the various needs not only exist at different levels but also are arranged in a preponent hierarchy. These studies deal with the satisfaction of psychological needs of managers in bottom- and middle-management positions. The results of the 1962 study showed that deficiency in needs of managers decreased with increase in management hierarchy. For the needs of self-actualization, autonomy and esteem, satisfaction increased at each higher level of management. This is because middle and upper level managers have more opportunity to satisfy needs than the lower-level managers. For the lower types of needs—security and social—there
were no systematic changes in satisfaction with respect to management level.

The study of Hall and Nougaim (1968) contradicts the Maslow model. To test the model they carried out a longitudinal study consisting of three tests: static analysis, change analysis and success analysis. They found the longitudinal study appropriate because they claim that Maslow's theory is one of personality change over time. Maslow says that a current class of needs are stronger at some particular time for some individual and when those needs are satisfied, their strength is weakened and needs at the next higher level become stronger. For him "a satisfied need is not a motivator" (Maslow, 1954, p. 105). Hall and Nougaim used static analysis and found out that the more a need is satisfied the more important it becomes. Static analysis consists in correlating the scores of the next higher and next lower levels of the hierarchy. In order to confirm Maslow's contention high correlations are expected between these two levels. The following is the hypothesis of the static analysis.

Hypothesis I: Within a given year, the satisfaction of a given level of needs will be positively correlated with the strength of the needs at the next higher level (p. 16).

The second hypothesis dealt with the changes in need satisfaction during the four periods between each of the
first five years of the study (that is, the period between year 1 and year 2, between year 2 and year 3, etc.). This was done to predict the correlations between change in satisfaction at a given need level and the change in need strength of the next higher level. The following hypothesis was designed to test the prediction (p. 16).

Hypothesis II: From one year to the next, changes in the satisfaction of a given level of needs will be positively correlated with changes in the strength of the needs at the next-higher level (change analysis).

The third hypothesis dealt with an objective measure of need satisfaction over the five-year period—the fifth-year income. This income was used to discriminate between "successful" and "less successful" managers by company standards. It was expected that needs and satisfactions of employees would clearly change by the end of the first five years of employment. "Since the more successful managers were more secure and better paid, this group was expected to score higher on satisfaction and lower on need strength in the safety category. In the Self-actualization and Achievement and Esteem levels, the successful managers were expected to have higher need scores, since their lower-level satisfactions would have engaged these needs more" (p. 16). The following hypothesis is designed to test this assumption (p. 16).
Hypothesis III: After five years of employment, successful managers will show lower need strength and higher satisfaction in the safety needs than will their less successful colleagues. Thus, they will show higher achievement and self-actualization need strength than will the less successful group (success analysis).

The subjects used for the study were forty-nine management-level employees who were hired in 1957 by the American Telephone and Telegraph Company after graduating from college. They remained with the company for at least five years and at the end of this period most were promoted to either the position of supervisor or district manager. The subjects were interviewed about their jobs and human relationships. After an analysis of the contents of the interview, nine need categories were developed and items in each category were given need strength ratings ranging from 1 (low concern) to 3 (high concern). A satisfaction score of each category ranging from +2 (over satisfied) through 0 to -2 (highly dissatisfied) was also obtained.

The results for the static analysis show that none of the correlations predicted is large. In other words, low correlations were obtained when scores on the satisfaction of a given level of needs are positively correlated with those on the strength (intensity) of the needs at the next higher level. The correlation coefficient between safety satisfaction and affiliation
need strength (intensity) at next higher level is .18; that between affiliation satisfaction and the next higher level—achievement and esteem (intensity)—is .23; that between achievement and esteem satisfaction and self-actualization need strength is .10. These figures do not offer any significant support to Maslow's contention.
The results also show that contrary to the Maslow model, need satisfaction at a particular level correlated positively with need strength (intensity) at that same level. The coefficient between safety satisfaction and safety strength (intensity) is .26; that between affiliation satisfaction and affiliation strength is .16; that between achievement and esteem satisfaction and achievement and esteem strength is .54 and self-actualization satisfaction and self-actualization strength is .29. This shows that the more the need is satisfied the stronger it becomes.

The coefficients of the change analysis are not high either; that is, the coefficients obtained from correlating changes in the satisfaction of a given level of needs with changes in the strength of the needs at the next higher level were quite low. However, two of these coefficients received moderate degrees of support (.22 and .20). As with static analysis, the correlations
between the satisfaction of needs and their own intensities (strengths) were strong—they ranged from .21 to .53.

For the success analysis it was hypothesized that after five years of employment successful managers will show lower need strength in safety needs and higher need strength (intensity) in achievement and self-actualization needs than will the less successful group. The studies show this to be the case. As the managers advanced in their careers both the successful and the less successful groups decreased in their concern for safety gratifications and increased in their need for achievement and esteem and self-actualization. At first sight, this seems to support Maslow's position. But since the prediction was true not only for the successful group but also for the unsuccessful one, Hall and Nougaim concluded that the changes in need are not specifically related only to decrease in the gratification of the lower need category of safety. They argued that the changes are associated with normal changes in the different career stages. It had little or nothing to do with Maslow's prediction.

It was argued that these changes could be explained by a model of sequential career stages, which may be more the result of regularized status passages than of lower order need gratification (p. 12).
It was also hypothesized for the success analysis that successful managers will show higher satisfaction of safety needs as these safety needs decrease. The data obtained showed that the average satisfaction decreased in each of the lower levels. This is contrary to Maslow's prediction that managers should be more satisfied in the lower categories since it is supposed that gratification of lower needs reduces the strength of those needs and increases the strength of higher needs.

The study of Lawler and Suttle (1972) also disproved Maslow's model. They developed and tested the following three hypotheses that reflect Maslow's model.

Hypothesis I. The satisfaction of needs in one category should correlate negatively with the importance of these same needs and positively with the importance of needs in the next higher level of the hierarchy.

Hypothesis II. Changes in the satisfaction of needs in one category should correlate negatively with changes in the importance of needs in the same category, and positively with changes in the importance of needs in the next higher level of the hierarchy.

Hypothesis III. High satisfaction of the needs in one category at \( t_1 \) should be associated with low importance of the needs in the same category at \( t_2 \) and with high importance of the needs in the next higher category of the hierarchy at \( t_2 \) (p. 271).

The results of this study offer little support for Maslow's contention that first, needs are arranged in a hierarchy and second, that when the lower needs are
satisfied the ones at the next higher level are activated or become stronger.

Alderfer (1969 and 1972) proposed a new theory of human needs called the Existence-Relatedness-Growth theory. Instead of the five levels of need proposed by Maslow, Alderfer claims that human beings have basically three sets of needs: 1. "Existence needs include all the various forms of material and physiological desires. Hunger and thirst represent deficiencies in existence needs. Pay, fringe benefits, and physical working conditions are other types of existence needs" (Alderfer, 1972, p. 9). 2. "Relatedness needs involve relationships with significant other people. Family members are usually significant others, as are superiors, coworkers, subordinates, friends and enemies" (Alderfer, 1972, p. 10). 3. Growth needs involve the individual's desire for opportunities for personal development. They "impel a person to make creative or productive effects on himself and the environment" (Alderfer, 1972, p. 11).

Human needs are reported by Alderfer as being in a continuum ranging from most concrete (existence) needs through the moderately concrete (relatedness) needs to the least concrete (growth) needs. Although there is some notion of need hierarchy implicit in this continuum, Alderfer does not require that the need at the lower level be satisfied before the need at the next
higher level is activated. For him, a man with unfulfilled physiological needs can think of satisfying other higher needs. "E.R.G. theory would say that a chronically hungry man can recognize whether he feels connected to primary groups and to society and whether he is able to engage in activities which enable him to use his skills and talents (1969, p. 154).

Maslow's theory can be referred to as "fulfillment-progression" or "satisfaction-progression" since the individual must satisfy one level of need before proceeding to the next higher level. But for Alderfer, satisfaction-progression reasoning is based on the premise that as a person fulfills the more concrete aspects of his desires, more of his energy becomes available to deal with the less concrete, more personal, and more uncertain aspects of living. As he is able to fulfill existence needs he needs to spend less of his energy in search of material things. Consequently he is more able to attend to interpersonal issues. Realistically, he no longer needs to fear other human beings as competitors for scarce material resources. As he is able to find fulfillment of his relatedness needs, he no longer lacks authentic social support. He has found relationships where it is possible for him to share the complex and subjective parts of his emotional life. Again he is more free to have his energy be turned to the most personal and unique parts of living, being and becoming what he can most fully. Satisfaction of relatedness needs has relieved him of the anxiety of social uncertainty. More of his energy, therefore, is available for expanding and utilizing the fullness of his person (1969, pp. 151-152).

Alderfer's theory not only posits "satisfaction-progression" but also "frustration-regression." The "frustration-regression" component
concerns the tendency of persons to desire more concrete ends as a consequence of being unable to obtain more differentiated, less concrete ends. Thus a person is thought to desire existence needs when relatedness needs are not satisfied because he is using them as an easier, more concrete way of establishing his connectedness with other people. He seeks relatedness needs when he is unsatisfied with his growth because he is searching for opportunity for more clarity and support in the quest to stretch, develop, and expand himself (Alderfer, 1969, p. 151).

The seven major propositions of the E.R.G. theory are as follows (1972, p. 13):

P1. The less existence needs are satisfied, the more they will be desired.
P2. The less relatedness needs are satisfied, the more existence needs will be desired.
P3. The more existence needs are satisfied, the more relatedness needs will be desired.
P4. The less relatedness needs are satisfied, the more they will be desired.
P5. The less growth needs are satisfied, the more relatedness needs will be desired.
P6. The more relatedness needs are satisfied, the more growth needs will be desired.
P7. The more growth needs are satisfied, the more they will be desired.

Propositions 1 and 4 can be subsumed under what Alderfer refers to as "simple frustration hypothesis." When some specific need is not satisfied, the ensuing frustration is heightened since the desire to achieve fulfillment is heightened. In such a case frustration increases motivation. Propositions 2 and 5 are based on the idea of "frustration-regression." When a person fails to attain less concrete aims, he "regresses" to needs that are not only more concrete but also that he is more
certain to attain. Propositions 3 and 6 are based on the idea of "satisfaction-progression." As a person attains the more concrete aims, he finds time and opportunities for more uncertain needs. Proposition 7 states that the more growth needs are satisfied the more they will be desired. Alderfer says that growth needs are the most desirable needs since by their very nature they are intrinsically satisfying. This is because "the more a person grows, the more he wants to grow; the less he grows, the less he desires to grow" (p. 152). As growth occurs the person is faced with many new opportunities to improve and enrich his personhood. This does not mean that failure cannot befall him. He may encounter hard times but his perception of his failures and his attitudes toward learning from his mistakes are crucial to continuous growth.

It may seem paradoxical that a person should feel more competent following failure. However, if one assumes that some failure is part of living, then coping with it in a way that enlarges one's personhood can enhance a person's sense of competence. One expanded aspiration mechanism states that the more a person experiences himself as a full and differentiated human being, the more he will aspire to be a whole and rich person. Both success and failure can be growth satisfying experiences. The more a person finds added wholeness in his living, the more he will seek additional opportunities to grow both on the same dimensions where he has already grown and in new arenas in his life (Alderfer, 1969, pp. 152-153).

There are other differences between Maslow and Alderfer besides the difference in the notions of
hierarchy explained above. According to Maslow a satisfied need cannot play any active, determining role in the person's life. Thus the individual progresses through a hierarchy of needs. But for Alderfer the hierarchy principle can work in reverse (Propositions 2 and 5): if a higher-order need is frustrated, the lower-order need is activated. Another difference between the two theories deals with Maslow's contention that a satisfied need is not a motivator. Alderfer's proposition is a clear departure from Maslow's (1943) position. Proposition 7 states that the more growth needs are satisfied, the more they will be desired. Here growth itself becomes a motivator for more continuous growth.

However, Maslow's (1962, p. 31) position is in essential agreement with the E.R.G. position: "Growth is instead a continued, more or less steady upward or forward development. The more one gets, the more one wants, so that this kind of wanting is endless and can never be attained or satisfied."

Alderfer (1969) constructed several hypotheses from the Maslow and E.R.G. theories and developed methodologies for testing these hypotheses. There was strong support for most of the hypotheses of the E.R.G. theory. But there was lack of empirical support for the Maslow hypotheses. Alderfer (1972) also developed scales for
the measurement of the E.R.G. concepts as well as for Maslow's concepts. In general the E.R.G. measures showed convergent, discriminant and predictive validity for the variables of satisfaction and desire. Satisfaction measures showed greater discrimination among specific needs than desire measures. Of the three E.R.G. concepts the Relatedness need scales showed the greatest uncertainty for both variables of satisfaction and desire. With the exception of the self-actualization concept, Maslow's concepts showed little convergent or discriminant validity. The measures of self-actualization were as high as those for the growth concepts. Like the E.R.G. scales, satisfaction measures from Maslow's scales showed greater discriminant and convergent validity than desire measures.

Wanous and Zwany (1977) confirmed the existence of the three categories proposed by Alderfer. Alderfer examined the effect of different levels of need fulfillment on the satisfaction/importance relationships among different types of organizations. These relationships were then explained in terms of basic organizational differences, for example, the satisfaction obtained by those employed in dissimilar organizations. Wanous and Zwany hypothesized that the results of Alderfer's research can be replicated within a single organization by using need fulfillment as a moderator variable.
Data was collected from 208 employees who worked on 13 different jobs for an eastern telephone company. Wanous and Zwany adopted and modified the need category scale of Alderfer (1972). They developed 23 job facet items which were divided into the three need categories of Existence, Relatedness and Growth. The validity of the three categories of the new scale was carefully assessed during its development. In order to maintain the theoretical meaning of the need concepts, the conceptual definition was used as the overriding criterion for each type of need. Cluster analysis was used to clearly group the 23 items into groups and factor analysis was used to ensure that the obtained clusters were statistically independent (that is, uncorrelated) and to determine the strength of the relationship between a variable and a cluster of which it is a member. The theoretical definition of Existence and Growth needs were empirically supported. Only the Relatedness need category showed a discrepancy between its theoretical definition and the empirical results and so theory was used to construct the Relatedness need category. A total of 18 items were finally selected for the scale. The selected eight Growth items fell into Cluster I and loaded on Factor I with factor loadings between .33 and .78. Their item-total correlations ranged from .67 to .85. The
selected three Existence items all fell into Cluster IV and loaded together on Factor II with factor loadings between .51 and .58. Their item-total correlations ranged from .75 to .81. The selected seven Relatedness items fell into different clusters and loaded on different factors; so the decision was based on theoretical definition and item-total correlations which ranged from .58 to .64.

The following reliabilities were reported by the authors for the developed categories. For the existence category the average inter-item correlation was .41 and application of a Spearman-Brown formula to this average intercorrelation indicated a significant reliability (rr=.68). For the Relatedness category the average inter-item correlation was .22 and a reliability (rr=.66) was obtained using the Spearman-Brown formula. For the Growth category the average inter-correlation was .49 and a high reliability (rr=.88) was obtained using Spearman-Brown formula.

The above data on validity and reliability of the scales support the empirical integrity of the E.R.G. categories. The Growth and Existence categories are shown to be both reliable and relatively independent of each other. The Relatedness category was not found to be too independent of the others but it was found to be
reliable. Another important finding is that, although Alderfer himself had placed less emphasis on the notion of hierarchy, the authors found a hierarchy among the E.R.G. needs. The subjects whose Relatedness and Existence needs were adequately met reported "high" Growth needs. Only a few subjects (17 out of 208) reported "high" Growth needs when their Relatedness and Existence needs were either "moderate" or "low." The authors also found that need fulfillment moderates the relationship between need satisfaction and need importance for different individuals. Alderfer got a similar result for different types of organizations.

Although the research confirms the existence of the three categories of Alderfer, the researchers concluded that the theory is not too useful for day-to-day management practices. "The overall level of relationships found here, and in many previous studies, reduces the immediate usefulness of need hierarchy theory for day-to-day management. At the basic policy level, however, these results may be potentially helpful (1977, p. 96).

Herzberg, Mausner and Snyderman (1965) obtained data from interviews of 200 engineers and accountants that showed that certain job characteristics led to job satisfaction while other characteristics led to dissatisfaction. The job characteristics or conditions that are related only to dissatisfaction do not serve to
motivate although they cause discontent when absent. They are called maintenance factors (since they serve to maintain satisfaction) or hygiene factors (since they remove health hazards from the environment). Hygiene "is not a curative; it is, rather, a preventive" (p. 113). Hygiene needs include such things as pay, security, co-workers, general working conditions and company policies. The job conditions that lead to satisfaction are called motivators or satisfiers. These are higher-order needs of man to self-actualize himself and are not there, like hygiene, to meet avoidance or preventive needs.

In contrast to this motivation by meeting avoidance needs, the job factors reward the needs of the individual to reach his aspirations. These effects on the individual can be conceptualized as actuating approach rather than avoidance behavior. Since it is in the approach sense that the term motivation is most commonly used, we designate the job factors as the "motivators," as opposed to the extra-job factors, which we have labeled the factors of hygiene. It should be understood that both kinds of factors meet the needs of the employee; but it is primarily the "motivators" that serve to bring about the kind of job satisfaction and,...the kind of improvement in performance that industry is seeking from its work force (1965, p. 114).

Included among the motivator factors are job achievement, recognition, advancement, potential for personal growth, responsibility and the nature of the work itself. (These are referred to as the content dimensions of the job.) Herzberg said that these content dimensions produce satisfaction and do not cause dissatisfaction when absent
while the hygiene factors (referred to as context dimensions of the job)—lead to dissatisfaction and do not guarantee satisfaction. He therefore claimed that satisfaction and dissatisfaction do not seem to be simple opposites and thus he proposed a two-factor theory of motivation.

Herzberg's "maintenance" and "motivator" factors can also be described respectively in terms of intrinsic and extrinsic motivators. Intrinsic motivators are those aspects of the job that relate to the nature of the job itself: self-actualizing oneself on the job, completing the tasks one does and gaining competence in different areas of the job. Extrinsic rewards, on the other hand, are not directly related with the nature of the task. They come after the task has been performed. Increase in pay and extra fringe benefits are examples of such rewards. Maintenance factors seem analogous to extrinsic motivators while motivators seem analogous to intrinsic motivators.

Herzberg says that the goal of an employee is to move from the lower level of functioning—hygiene seeking—to the higher level of motivation seeking.

The hygiene seeker, as opposed to the motivator seeker, is motivated by the nature of the environment of his job rather than by his tasks. He suffers from a chronic and heightened dissatisfaction with his job hygiene. Why? Because he lives by it. He has an overreaction to improvement in hygiene
factors. You give him a salary raise and you become the most wonderful boss in the world...But the satisfactions of hygiene factors are of short duration...and the short action applies as well to the motivator seeker, because this is the nature of the beast (Herzberg, 1966, pp. 88-89).

The motivator seeker is motivated by the nature of the task, realizes great satisfaction from accomplishments, profits professionally from experience and shows capacity to enjoy the kind of work he does. Herzberg proposes the technique of job enrichment for accomplishing the movement to motivation seeking. This job enrichment consists in providing employees with interesting work. The task must be enriched psychologically and made more stimulating.

Herzberg (1966) provides a summary of research that supports the two-factor theory. Baird (1977, p. 89) indicates that of the works that Herzberg cited only those that used Herzberg's interview method clearly support the two-factor theory. Those that used different methodologies showed little support. This criticism is also made by Dunnette, Campbell and Hakel (1967). They indicate that the two-factor theory is only viable when Herzberg's own method is used. In this sense the theory is "method bound."

We contend that the two-factor theory is shackled to the storytelling method and that the theory's proponents are now more concerned with the game... of protecting and nurturing this pet theory than in advancing knowledge about job motivation and job satisfaction (1967, p. 148).
They also contend that the problem with the interview or storytelling method is that it is open to an oversimplified pattern of interpreting data and results. Because of the highly subjective portrayal of incidents, experimental biasing effects are strong. Moreover,

Interviews provide no safeguards against defensive replies from the respondents; many respondents might quite naturally tend to attribute good job events to things they themselves had done (e.g., achievement, recognition, responsibility) and bad job events to things outside or extrinsic to themselves (e.g., working conditions, supervision, company policies and practices). If such were the case, the findings of Herzberg et al. speak more clearly to a basic aspect of human nature (the tendency to want to "look good" in the eyes of others) than to the motivational or satisfying effects of different types of job situations or environment (1967, pp. 147-148).

Dunnette and his associates provided data to show that the association of certain job dimensions with satisfaction and others with dissatisfaction is far from perfect.

The attention of Herzberg et al. was drawn to the moderately sized differences between corresponding percentages in the satisfying and dissatisfying columns. Clearly, the first five job features—Achievement, Recognition, Work Itself, Responsibility, and Advancement—are more often associated with satisfying stories, and another five job features—Interpersonal Relations with Supervisors, Interpersonal Relations with Co-workers, Technical Aspects of Supervision, Company Policy and Administration, and Working Conditions—are more often associated with dissatisfying stories. But it is also apparent that the association is far from perfect; a substantial number of the dissatisfying incidents involved instances of low achievement, lack of recognition, dislike of the work itself, missing an expected promotion. etc. Similarly, a number of the satisfying incidents involved good
supervision, good co-workers, and good company policies. Nevertheless, Herzberg and his associates...chose to ignore these individual differences, in favor of stating a general theory of job "motivation" (1967, p. 145).

The data that confirm the above conclusion for subjects in six occupational groups are given in six tables—Tables 11-15 of the article of Dunnette et al. These tables give the job dimensions that are the most salient (highest job-dimension means) for satisfying and dissatisfying descriptions for each of the subgroups identified by Q-type and A-type factor analyses. The descriptions of satisfying and dissatisfying job events given are so diverse that no one particular job dimension can be identified as completely leading toward only satisfaction or dissatisfaction. "For some persons, satisfaction resides in the so-called job content dimensions; for others, it resides among the so-called context dimensions; and for still others, satisfaction resides in combinations of the two job dimension groupings. In like manner, job dissatisfaction resides not only in the job context,...but also...in the job content and in situations comprised of combinations of context and content" (1967, p. 165). The results disproved Herzberg's theory.

The study of Hinrichs and Mischkind (1967) also fail to confirm the two-factor theory. Their questionnaire was completed by 613 technicians doing service work for a
large national company. The authors tested both Herzberg's satisfier/dissatisfier or motivator/hygiene hypotheses and the following hypothesis which is directly at variance with the theoretical prediction of Herzberg's hypotheses.

Rather than operating unidirectionally, it was hypothesized that the types of job content factors which Herzberg labeled "motivators" would operate bidirectionally by being both the primary cause of positive satisfaction in high-satisfaction respondents, as well as the primary cause of negative satisfaction for low-satisfaction subjects. It was hypothesized that "hygiene" variables, on the other hand, would thus be responsible for the lack of total satisfaction for high-satisfaction subjects and for the lack of total dissatisfaction for the low-satisfaction subjects (p. 192).

Tables 1 and 2 below summarize the predictions from Herzberg's hypothesis and the present hypothesis (that of Hinrichs and Mischkind).

TABLE 1
Predictions from Herzberg's Formulation of the Most Salient Factors Operating as Positive or as Negative Influences on Overall Job Satisfaction as a Function of Present Level of Satisfaction.

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<th>Direction of Influence</th>
<th>Level of Present Job Satisfaction</th>
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<td>Low</td>
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<td></td>
<td>High</td>
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<tr>
<td>Positive Factors</td>
<td>Primarily Hygiene</td>
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<td>Negative Factors</td>
<td>Primarily Hygiene</td>
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<tr>
<td></td>
<td>Primarily Motivators</td>
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<td>Primarily Motivators</td>
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TABLE 2
Predictions for Present Study of the Most Salient Factors Operating as Positive or as Negative Influence on Overall Job Satisfaction as a Function of Present Level of Satisfaction.

<table>
<thead>
<tr>
<th>Direction of Influence</th>
<th>Level of Job Satisfaction</th>
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<tbody>
<tr>
<td></td>
<td>Low</td>
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<tr>
<td>Positive Factors</td>
<td>Primarily Hygiene</td>
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<tr>
<td>Negative Factors</td>
<td>Primarily Motivators</td>
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In Table 1 it is hypothesized that the job content factors labelled by Herzberg as "motivators" are the only primary cause of positive satisfaction among high-satisfaction respondents. They are predicted not to be the primary cause of negative satisfaction in low-satisfaction respondents. In Table 2, it is hypothesized that the motivators are both the primary cause of negative satisfaction in low-satisfaction respondents. On the other hand, it was hypothesized that the factors labelled "hygiene" are the primary cause of the lack of complete satisfaction in high-satisfaction respondents and for the lack of complete dissatisfaction in the low-satisfaction respondents.

The results were analyzed in terms of the weighted mentions of each of the motivation factors by the
high- and low-satisfaction groups and the proportions with which each was mentioned as positive or as negative reasons for the present levels of overall satisfaction. Both the hypothesis of Herzberg and that of the present study permit the following prediction about the relative mention or frequency of the two classes of variables (motivator and hygiene): (a) Herzberg's scheme and the present hypothesis (Hinrichs and Mischkind) would predict that motivators would be relatively more frequent as positive reasons for high-satisfaction than as low-satisfaction. The data supports this prediction. (b) Herzberg's hypothesis would predict that hygiene variables would be relatively more frequent as negative reasons for low-satisfaction respondents than as negative reasons for high-satisfaction respondents. The present hypothesis predicts the reverse of Herzberg's prediction and the data obtained by the two researchers support it. If, as Herzberg predicts, hygiene factors are responsible for negative satisfaction below a neutral point, then it is the dissatisfied workers, not the satisfied ones, that should mention them relatively more frequently as negative reasons. Other predictions tested by Hinrichs and Mischkind are as follows (p. 197).

1. Hygiene variables should be mentioned relatively more often as negative than as positive reasons by high-satisfaction subjects.
2. Hygiene variables should be mentioned relatively more often as positive than as negative reasons by low-satisfaction subjects.
3. Motivators should be mentioned relatively more often as positive than as negative reasons by high-satisfaction subjects.
4. Motivator variables should be mentioned relatively more often as negative than as positive reasons by low-satisfaction subjects.

The authors report that predictions 1, 2 and 3 were confirmed but prediction 4 was not. In any case the contradictory results obtained from the present study seriously undermine the two-factor theory.

The relevance of the theories of Maslow and Herzberg to the present research lies in the way they explain the attainment of job satisfaction. As content theories they are concerned with finding out the motives, drives and goals of individuals that make them initiate, sustain or stop some job-related behavior. For example, they would try to discover the motive behind the chairperson's decision to engage in a behavior such as modifying a certain policy to satisfy the faculty members. When the chairperson is motivated to adopt and execute administrative policies that affect the faculty he usually has in mind some particular faculty needs that must be satisfied or some faculty values that must be attained for faculty members to be satisfied with their job. Maslow would argue that since faculty members have already attained the lower level needs, the chairperson would devote his energies to the development of policies
that would facilitate the satisfaction of higher level needs such as self-actualization. Herzberg would argue that the goal of the chairperson is to develop policies that would enable faculty members to move from some lower level of functioning (hygiene factors) to the higher level of motivation functioning. But, unlike Maslow, he would suggest that unsatisfied lower needs could exist and be important in both motivational and maintenance levels simultaneously. Alderfer (1969) would hold that the chairperson would develop policies that would enable the faculty to meet the lower needs of Existence and Relatedness as well as the higher Growth needs. But, like Herzberg, he would hold that some lower needs could co-exist with higher ones. The faculty would be interested in the attainment of any of the highest needs described by the three theorists—self-actualization needs or motivational needs or Growth needs—and so would prefer a chairperson that would develop policies that would facilitate the attainment of such needs.

4. Implications of the Theories of Job Satisfaction and Work Values for This Study

The review above points to needs, expectations and values as important sources of job satisfaction. The theorists argued not only over which variables are better determinants of job satisfaction, but also, over which
methods can more accurately determine job satisfaction. The discussion below shows that many of the important points they raised have implications for this study.

For some of the theorists, it is employee expectations that determine job satisfaction (Ilgen, 1971; Spector, 1956). Others argue that it is the degree to which the job fulfills the employee's needs that determines job satisfaction (Lofquist and Dawis, 1969; Morse, 1953; Porter, 1961 and 1962; Schaffer, 1953; Wofford, 1971). And still for others, it is the values of the employee that determine job satisfaction (Locke, 1976). However, the literature review on the job and responsibilities of the chairperson shows that departmental operations are complex and involve an interaction of expectations, needs, values and job satisfaction.

DeVries (1975) found that a faculty member's values or self-expectations determine to a significant degree the distribution of his efforts across the three important roles of teaching, research and administration. The study was based on the assumption that "how a faculty member divides his effort across several roles follows strongly from the relative amount of value he places on the several roles" (p. 119). This finding provides information for chairpersons who want to know what their faculty value and on what they want to exert their efforts.
The study of Carroll (1976) on role conflict in departmental management showed how faculty needs, expectations and job satisfaction are affected by the decisions made by chairpersons. He lists the following decision areas as the sources of conflicting expectations among the faculty: faculty salary, faculty promotion, academic tenure, faculty hiring, departmental budget, and faculty time allocation. "Departmental Chairmen must attempt to satisfy all of these needs of his faculty, but due to budget constraints he is often frustrated in his efforts to secure enough resources to satisfy all organizational members under his jurisdiction" (p. 245).

Failure to satisfy the faculty because of conflicting expectations has a negative consequence for the chairpersons too. Carroll found a significant correlation between the occurrence of role conflict and decreased job satisfaction of department chairpersons.

These studies show that the needs, values and expectations of faculty members have significant influence on faculty job satisfaction. When the expectations and needs of the faculty are not met by the chairpersons or when the value systems of the chairpersons are incompatible with those of faculty members, the latter are likely to be dissatisfied with their job. The present study determines job satisfaction with respect
to the leadership behavior and value systems of the chairperson.

The methods of determining job satisfaction used by the theorists discussed in this review are also relevant to the present study. Many of the theorists determined job satisfaction with respect to the degree of discrepancy between what the employee is getting from the organization and what he believes he should be getting. Some point to discrepancy in expectations as a determinant of job satisfaction (Ilgen, 1971; Spector, 1956). Others argue that discrepancy in needs is a better determinant of job satisfaction (Porter, 1961 and 1962). Still others argue that job satisfaction is determined with respect to the discrepancy between the amount of value the subject perceives to be getting and the amount he believes he should be getting (Locke, 1976). Many did not use the discrepancy-correlation method. They used the Pearson correlation method instead. The present study employed the discrepancy, partial and Pearson correlation methods of determining job satisfaction. This study also compared the three methods in order to find out which one yields coefficients that are more accurately descriptive of the relationship between job satisfaction and the variables of values and leadership behavior.
CHAPTER III

METHODOLOGY

Rationale for Choice of Survey Research Design

A descriptive survey design methodology was used in this study to determine faculty job satisfaction. Job satisfaction was determined in terms of the degree of discrepancy between (1) faculty members' perceptions of their ideal and real chairperson's behavior and (2) between the value systems of faculty members and those of department chairpersons. The kinds of survey method that can be used in data collection for this kind of study are mail questionnaires, telephone surveys and face-to-face interviews. Ideally, a combination of two or all of these would produce very reliable information but, in practice, the cost of using the three methods is too high. Mail questionnaires were used because the three universities were located in three different cities. Thus face-to-face interviews and telephone calls would have been very costly.

There is also growing concern that face-to-face interviews may not be as successful as they once were and are becoming prohibitively expensive...Most disturbing is the difficulty interviewers face in locating respondents. An increasing number of
call-backs are now required to reach the occupants of sampled households (Dillman, 1978, pp. 2-3).

Another disadvantage of collecting data by an expensive method is that the prohibitive costs can lead to basing sample size decisions not on information needed to accomplish research objectives but on the availability of funds.

In face-to-face interview studies, sample size is more often determined by how many cases one can afford than by the number, in some sense, ideal for the study. Sample sizes are seldom sufficient to allow confident generalization to subcategories of the population, for example 18–24-year-olds in a survey of voters. Although quota sampling or oversampling is frequently done to get adequate representation for subcategories of special interest, it is only a limited solution. More frequently, researchers would like to generalize results to many more subcategories than interviewing costs allow (Dillman, 1978, p. 5).

Because the sample of this study was large the use of mail questionnaires was deemed to be the most economical way to reach a representative sample, that is, a sample which contained all subcategories (sex, rank, age, degree and length of service).

The Population

The population for the study was approximately 2,450 and consisted of all the full-time faculty members in three state universities in Ohio. Approximately 308 subjects were randomly selected from each university. The sample of 925 (37.8 percent of the population) was
drawn from 70 academic departments. The terms "division" and "school" were used to refer to some academic units. But for this study they were all treated as departments. Only state universities were selected because they share the following characteristics in common: (a) they have similar academic and administrative structures and policies under which academic departments enjoy relative autonomy, (b) they are all large state institutions each with at least 450 faculty members, and (c) they are all affected by governmental policies such as the cutbacks in financial allocation and the freeze on faculty salaries in the early 1980s.

The above similarities justify their inclusion in the population of the study.

Instrumentation

The following three instruments were used for the construction of the instruments for this study: (a) The Leader Behavior Description Questionnaire (Stogdill and Coons, 1957); (b) Scott's (1965) value scale; and (c) Morse's (1953) job satisfaction scale.

The short form of the Leader Behavior Description Questionnaire (Stogdill and Coons, 1957) was modified and used for the measurement of the desired (ideal) and observed (real) leadership behavior of the chairperson. Fleishman (1957) developed two dimensions of leadership
behavior—Consideration and Initiating Structure—based on item-dimension loadings from an industrial sample. The two dimensions were found to be independent in two samples ($r = .02$) but in one sample a correlation of $-.33$ was found between the two of them. Test-retest reliabilities over 11 months of .58 and .87 for Consideration and .46 and .75 for Initiating Structure were reported. Split-half reliabilities obtained using Spearman-Brown formula for various samples ranged between .68 and .98. The validity of the scales was assessed in terms of correlations between ratings of foreman behavior and various independent criteria of leadership effectiveness. These correlations ranged from .04 to .49 for Consideration and from .06 to .51 for Initiating Structure. Some of the high scores on Consideration were $-.31$, $-.38$, $-.42$, and $-.59$; and some of the high scores for Initiating Structure were $.45$, $.47$ and $.51$.

The scale for the present study consisted of 20 items (ten from each dimension) chosen from Fleishman's short scale and slightly modified to suit an educational setting. The criterion for item inclusion in the present scale was based on the following decision rule: (1) The item should have an orthogonal factor loading no lower than .2; (2) it should have a high loading with the dimension in which it is to be included; and (3) it should have insignificant (no more than .25) loading on
the other dimension. The 20 items were modified not only
to reflect a university setting, but also to refer to the
leadership behavior of the chairperson. They were also
mixed up to avoid bias rating. The rating of each item
was based on the following five-point frequency scale:
Always (5), Frequently (4), Usually (3), Seldom (2) and
Never (1). (Fleishman weighted the alternatives for each
item from 0 to 4.)

The revised value scale of Scott (1965) was slightly
modified and used for the measurement of the values of the
faculty and the chairperson. It was necessary to modify
Scott's scale, first, because it is too long. It consists
of 12 subscales each with 20 items. Only two subscales
were selected for the study. Second, half of the 20 items
in each subscale are positively-worded items and the other
half are negatively-worded items. The positive and
negative items within each subscale were constructed in
such a way that they were opposites of each other. So
to avoid using contradictory items, only ten items were
selected from each of the two selected subscales. The ten
items selected from each scale included both negative
and positive items but it was ensured that no item
contradicted the other.

The two subscales selected for the study were
Intellectualism and Kindness. The following ten—Loyalty,
Academic Achievement, Physical Development, Social Skills,
Status, Honesty, Religiousness, Self-Control, Creativity and Independence—were not selected either because some were not found to be appropriate for this study, or because, though some were appropriate, they were not found to be necessary for an adequate representation of faculty values. The following three—Physical Development, Academic Achievement, and Religiousness—were found not to be too relevant for the study of faculty in state universities. The Religiousness subscale was found by Scott to be more applicable to religious institutions. The items on the Academic Achievement subscale deal with student grades and the Physical Development subscale is not directly relevant to faculty social and intellectual views. The following five—Social Skills, Honesty, Self-Control, Independence and Status—were found to be relevant but not selected because the items under the selected subscale of Kindness reflected them to some extent.

It is important to point out that although the two values of Intellectualism and Kindness are said to adequately reflect several other values, it does not mean that these values are all highly inter-dependent. It means that there is some degree of relationship between them but not enough to interfere with the conceptual and empirical independence of each subscale.
Such independence justifies the possible use of only part of the entire scale. Scott reports on the independence of the revised subscales in Tables A-3 (p. 258) of his book. This table shows that the 20 items within each subscale are more highly correlated with each other than they are with items from different subscales. It shows that no correlation between any two subscales exceeds the separate reliabilities of those subscales. For example, the correlation between Intellectualism and Kindness is .40 but their separate reliabilities are .82 for Intellectualism and .85 for Kindness. "This procedure was aimed at maximizing intra-scale homogeneities and minimizing inter-scale correlations" (Scott, 1965, p. 249).

Construct validity was used to ensure that the intended meaning of the concept of value was conveyed by the items. Correlations were obtained using two separate criteria for assessing validity. The correlations obtained from one set of ratings using the first criterion ranged from .52 to .58 and when corrected for attenuation they ranged from .74 to 1.00. The correlations obtained using the second criterion ranged from .44 to .63 and when corrected for attenuation they ranged from .67 to 1.00. This validity test was for the original scale but its results are applicable to the new, expanded scale
which has the same dimensions. The difference between the original and revised scale, which is used in the present study, is that while the original consists only of direct-scored items the revised one consists of both direct-scored items and indirect-scored items. Using Cronbach's (1951) coefficient alpha for estimating reliability, the author reported reliabilities in the .80s for each of the revised subscales. The reliabilities for the two value subscales of this study are: Intellectualism, .82 and Kindness, .85. Correlations between the revised and original scales ranged from .62 to .81.

Of the 20 items selected for this study from the Intellectualism and Kindness subscales, only about two were slightly modified in order to make them more suitable for use in an educational organization. Also, a five-point frequency scale ranging from "Always" (five points) to "Never" (one point) was used for the present study. (Scott used the alternatives "Always Admire," "Depends on situation" and "Always Dislike.")

The satisfaction scale developed by Morse (1953) was modified and used for the measurement of faculty job satisfaction. The four subscales were Intrinsic Job Satisfaction, Company Involvement, Financial and Job Status and Pride-in-Group-Performance. The author
determined validity in terms of the independence of the four subscales. Theoretically, the content of the items within subscales are different and this seems to make the subscales independent, but empirically they were found to be significantly correlated. The author reports that only Pride-in-Group-Performance was found to be least correlated with the other three scales (.05, .04, and .00). The correlations between the other three were mostly in the .30s and .40s. So they were more interdependent. As for reliability, average inter-item correlations indicated high internal consistency: Intrinsic Job Satisfaction .50, Company Involvement .45, Financial and Job Status Satisfaction .52 and Pride-in-Group-Performance .39. No test-retest reliability data were reported.

The items on Morse's (1953, pp. 14-17) scale were modified to reflect working conditions in an educational setting. Nine of her 16 items were used in the present scale of 14 items. The other five items were constructed by this researcher. Morse's items were followed mostly by alternatives whose weights ranged from one to five points. She used many different terms, for example, "good," "like," etc. to represent the numeric weights. The following were some of her alternatives: "very good" to "very poor"; "very satisfied" to "very dissatisfied"; "strong like" to "strong dislike"; etc. The five items
constructed by this researcher dealt with issues unique to academic departmental functioning. The following alternatives were used to rate items on the present scale: "very satisfied" (five points), "satisfied" (four points), "moderately satisfied" (three points), "dissatisfied" (two points), and "very dissatisfied (one point).

Field Testing of the Instrument

The final instrument used to collect data for this study consisted of 54 items and five scales (see Appendix A, pp. 226-229). It was divided into two parts. The first part consisted of: (a) Twenty items on the chairperson's leadership behavior variable: These items were followed by two sets of alternatives— one for rating the ideal behavior of the chairperson and the other for rating the real chairperson's leadership behavior. Therefore, there were two behavior scales—real and ideal. (b) Twenty items on the value variable: These items were followed by two sets of alternatives— one for rating the real chairperson's value system and the other rating the faculty members' value systems. Therefore there were two scales. (c) Fourteen items on the satisfaction variable for rating faculty job satisfaction. Therefore, there were a total of five scales for rating the items on the three variables.
Negatively worded items were included on the leadership and value system scales in order to avoid the contribution of acquiescent response pattern to the scores (Scott, 1965, p. 248). There were in all two items on the leadership behavior variable and ten on the value variable that were stated in a reverse or negative direction. The remainder of the items on both variables were positively worded items. The response categories or alternatives were scored 5, 4, 3, 2, and 1 for direct-worded items and 1, 2, 3, 4, and 5 reverse-worded items.

Part II of the instrument consisted of five items dealing with personal or demographic information—sex, rank, age, degree and length of service.

The draft of the instrument was pilot-tested in a large state university in Ohio. This university has a status comparable with the three selected for the study. The pilot instrument was completed by faculty members belonging to the same department. The instrument included an additional page (see Appendix B, p. 230) on which the respondents were asked three open-ended questions dealing with (a) the role of the chairperson, (b) the impact of that role on them and (c) the areas of faculty satisfaction which the questionnaire failed to address.
The following modifications were made on the basis of the comments made by the subjects who completed the pilot instrument: (a) three items were replaced on the Leadership Behavior Description Questionnaire and four others were slightly modified; (b) two items were slightly modified on the value scale; and (c) five items were replaced on the satisfaction scale.

Reliability coefficients for the final instrument are shown in Table 3, (p. 138). These reliability coefficients were based on average correlations among the items on each of the five scales and on all the five scales taken together. Cronbach's coefficient alpha for the 94 items (that is, the five scales together) was .93 and the standardized item alpha was .92. The reliability coefficient (Cronbach's alpha) for each of the five scales ranged from .76 to .90 and that for the standardized item alpha ranged from .78 to .91.

Data Collection

There were 1,024 subjects on the original list of subjects. The names, degrees, ranks and departments of the 1,024 subjects (faculty members) were obtained from the most current bulletins of the three state universities selected for the study. The subjects were from 70 randomly selected departments. About ten percent of the names were obtained through telephone calls to
<table>
<thead>
<tr>
<th>Type of Scale</th>
<th>Number of Items</th>
<th>Cronbach's Alpha</th>
<th>Standardized Item Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Scales</td>
<td>94</td>
<td>.93</td>
<td>.92</td>
</tr>
<tr>
<td>Ideal Chairperson's Leadership Behavior</td>
<td>20</td>
<td>.79</td>
<td>.80</td>
</tr>
<tr>
<td>Real Chairperson's Leadership Behavior</td>
<td>20</td>
<td>.86</td>
<td>.86</td>
</tr>
<tr>
<td>Real Chairperson's Values</td>
<td>20</td>
<td>.90</td>
<td>.91</td>
</tr>
<tr>
<td>Faculty Values</td>
<td>20</td>
<td>.76</td>
<td>.78</td>
</tr>
<tr>
<td>Faculty Job Satisfaction</td>
<td>14</td>
<td>.88</td>
<td>.88</td>
</tr>
</tbody>
</table>
the departmental secretaries. The secretaries were also called to find out how long each chairperson had been in office. Only departments whose chairpersons have been in office for at least two years were included. It was assumed that some faculty members would find it difficult to evaluate a chairperson with respect to the items on the instruments if the latter had been in office for less than two years.

Bulk mailing and business reply permits were obtained from the U.S. Post Office for the mailing of the instruments and for the receipt of responses. All instruments were coded for follow-up reasons and each was sent with a cover letter and a self-addressed Business Reply Envelope (see Appendix C, p. 233). Two weeks after the first mailing, the first follow-up reminder was mailed to all non-respondents (see Appendix C, p. 234). About three weeks later, the second follow-up reminder was posted (see Appendix C, p. 236). This included a cover letter and another copy of the questionnaire (see Appendix C, p. 236). Some respondents overlooked the second page of the instrument. The incomplete instruments were returned with a letter requesting these respondents to complete them (see Appendix C, p. 235).

In order to confirm the accuracy of the list of faculty members provided by the university bulletins,
letters were written to secretaries of the 70 departments requesting an updated list of all the faculty members on duty during the 1983-84 academic year (see Appendix D, p. 238). Two weeks later a reminder letter was sent to the chairpersons of secretaries who did not respond to the first letter (see Appendix D, p. 239). As a result of checking the lists of faculty members sent by the departments against the lists in the bulletins, it was discovered that 97 faculty members on the original list were not on campus during the 1983-84 academic year. Some had left the university and others have either retired or were on leave of absence. Those who were not full-time faculty members were also dropped from the list. This reduced the original sample to 925. The final response rate was 366 (39.5 percent of the original sample).

Statistical Design for Data Analysis

The researcher wrote the following information on the outside of the envelope of each returned instrument: the code number, the university, a note on the completeness of the items and the comments made by the respondent. The responses were then periodically key-punched on 80-column cards in accordance with the specifications of the Statistical Package for the Social Sciences (SPSSx, 1983). SPSSx was also used to obtain the
following statistical information: crosstabs, frequencies, reliabilities, Cronbach's alpha, one-way analysis of variance, Pearson product-moment correlation, partial correlation and the least significant difference post hoc tests for multiple comparisons. The statistical information was used as follows. Crosstabs were used to provide data on the following demographic variables: sex, rank, degree, age and length of service. Frequencies were used to provide statistical data on the subjects—percentages, proportions, barcharts, etc. To test the first three primary hypotheses (H1, H2, and H3) discrepancy-satisfaction correlation tests were done. To test the two other primary hypotheses (H4 and H5) the Pearson product-moment correlation and partial correlation tests were done. These three types of correlation methods provided three different ways of determining the relationships between each of the four variables—ideal leadership behavior of the chairperson, real leadership behavior of the chairperson, real chairperson's values, faculty values—and the dependent variable—faculty job satisfaction. The discrepancy-correlation method provided the means of determining satisfaction based on the discrepancy between the two leadership behavior variables and the two value variables. Pearson correlation provided a direct means of correlating the four independent variables with each other and with
the job satisfaction variable. The partial correlation method provided the means of correlating each of the independent variables with job satisfaction while controlling for the effect of one other independent variable. The above three correlation methods were then compared to determine which one represented a more accurate and meaningful way of determining job satisfaction. The one-way analysis of variance test was used to test for significant difference between the demographic groups under each of the five demographic variables—sex, rank, age, degree and length of service—with respect to the following three research variables: (a) real chairperson's leadership behavior, (b) real chairperson's values and (c) faculty job satisfaction.

Since the number of individuals in the groups under each of the five demographic variables were unequal, it was assumed that the homogeneity of variance might have been violated. Violating the homogeneity of variance assumption can yield a biased F test. "A biased F test is one where the actual probability of committing a Type I error is greater or less than the nominal level of significance" (Kennedy, 1978, p. 145). If the actual significance level is greater than the nominal level, then the F test is positively biased. In such a case a greater number of Type I errors than expected will
occur. If the nominal significant level is greater than the actual level then the $F$ test is negatively biased. This will not lead to excessive number of Type I errors but it will lead to a loss of power associated with the $F$ statistics (Kennedy, p. 156). The Bartlett-Box $F$ test was used to test for the homogeneity of variances. No violation of homogeneity was observed in the cases of the three research variables that were subjected to the analysis of variance test—real chairperson's behavior, real chairperson's values and faculty job satisfaction. In other words, when the Bartlett-Box $F$ test was done none of the probabilities obtained was less than the 0.05 significance level for these three variables.

The least-significant difference test was done as the post hoc test to the analysis of variance. This made possible the individual comparisons among the means. This kind of post hoc was appropriate because it could make comparisons between groups containing unequal number of subjects.
CHAPTER IV
ANALYSIS OF DATA AND FINDINGS

Introduction

The analysis of data is presented in two sections. In Section I the demographic profile of the respondents (Part II of the instrument) is reported. In Section II is presented the analysis of data gathered from faculty members on the leadership behavior and value variables (Part I of the instrument). The instrument is given in Appendix A, pp. 226-229.

SECTION I

Demographic Profile of the Respondents

This section consists of the profiles and comparisons of the total respondent group and the final sample group. Both the profiles and the comparisons were made with respect to the demographic variables of sex, rank, age, degree and length of service of the respondents. Similarities between the two groups were determined in terms of the percentage scores on the demographic variables. The substantial similarities found suggested that the respondents in the final sample used in the
analysis of data shared in common many characteristics with the total respondent group.

The original sample was 925. From this sample a total of 366 responses was received from the respondents. However, not all respondents completed all sections of the instrument. Therefore, for the purpose of analysis, the respondents were divided into two groups—the total respondent group and the final sample group. The total respondent group consisted of all the 366 faculty members that returned the instruments. These 366 respondents formed 39.5 percent of the sample. The final sample group consisted of only those 291 respondents (31.4 percent of the original sample) who completed all sections of the instrument. The 75 incomplete returned instruments were excluded from the analysis of data because the objectives of the study could only be met by analysis of complete sets of responses.

Sex of Respondents

Of the total of 366 respondents, 315 (86.1 percent) were male while 51 (13.9 percent) were female (see Table 4, p. 146). Of the 291 in the final sample, 250 (85.9 percent) were male while 41 (14.1 percent) were female. Therefore, the vast majority of the respondents in the two groups were male.
TABLE 4
Sex of Respondents

<table>
<thead>
<tr>
<th>Group</th>
<th>Group Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Final Sample</td>
<td>291</td>
<td>100</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>41</td>
</tr>
<tr>
<td>Total Respondent</td>
<td>366</td>
<td>100</td>
<td>315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>51</td>
</tr>
</tbody>
</table>

Ranks of the Respondents

The majority of the respondents (146, 50.2 percent) from the final sample (see Table 5, p. 147) were professors. Of the remaining ones, 101 (34.7 percent) were associate professors; 41 (14.1 percent) were assistant professors; and three (1.0 percent) were instructors. The majority of the respondents (185, 50.7 percent) from the total respondent group were professors. Of the remaining ones, 122 (33.4 percent) were associate professors; 53 (14.5 percent) were assistant professors and five (1.4 percent) were instructors. The computer registered 365 respondents instead of the 366 that constituted the total respondent group. As it happens with most survey instruments, some respondents skip or overlook a few items. The computer eliminated respondents (cases) who skipped items on the personal or demographic variables.

Similarities were found between the two groups. The following pairs of percentages refer respectively to
<table>
<thead>
<tr>
<th>Group</th>
<th>Group N</th>
<th>Total %</th>
<th>Instructor N</th>
<th>Instructor %</th>
<th>Assist. Prof. N</th>
<th>Assist. Prof. %</th>
<th>Assoc. Prof. N</th>
<th>Assoc. Prof. %</th>
<th>Professor N</th>
<th>Professor %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Sample</td>
<td>291</td>
<td>100</td>
<td>3</td>
<td>1.0</td>
<td>41</td>
<td>14.1</td>
<td>101</td>
<td>34.7</td>
<td>146</td>
<td>50.2</td>
</tr>
<tr>
<td>Total Respondent</td>
<td>365&lt;sup&gt;a&lt;/sup&gt;</td>
<td>100</td>
<td>5</td>
<td>1.4</td>
<td>53</td>
<td>14.5</td>
<td>122</td>
<td>33.4</td>
<td>185</td>
<td>50.7</td>
</tr>
</tbody>
</table>

<sup>a</sup>Number of missing cases: 1
the ranks of faculty members in the final sample group and the total respondent group: professors, 50.2 percent and 50.7 percent; associate professors, 34.7 percent and 33.4 percent; assistant professors 14.1 percent and 14.5 percent; and instructors 1.0 percent and 1.4 percent. The table also shows a correspondence between importance of rank and number of professors. The higher the rank the larger the number of faculty members.

**Age of the Respondents**

The majority of faculty members, 103 (35.6 percent) among the final sample were between 40 and 49 years of age (See Table 6, p. 149). Of the remaining ones, 46 (15.9 percent) were over 60 years of age; 78 (27.0 percent) were between 50 and 59 years of age; 61 (21.1 percent) were between 30 and 39; and one (.3 percent) were between 20 and 29. Of the total respondent group, the majority, 112 (35.4 percent), were between 40 and 49 years of age. Of the remaining ones, 52 (16.5 percent) were over 60 years of age; 84 (26.6 percent) were between 50 and 59 years of age; 66 (20.9 percent were between 30 and 39 years of age and two (.6 percent) were between 20 and 29 years of age.

Similarities were found between the two groups. The following pairs of percentages refer respectively to the age of faculty members in the final sample group and the
TABLE 6
Age of Respondents

<table>
<thead>
<tr>
<th>Group</th>
<th>Group Total</th>
<th>20-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>Over 60</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Final Sample</td>
<td>289</td>
<td>100</td>
<td>1</td>
<td>.3</td>
<td>61</td>
<td>21.1</td>
</tr>
<tr>
<td>Total Respondent</td>
<td>316\textsuperscript{a}</td>
<td>100</td>
<td>2</td>
<td>.6</td>
<td>66</td>
<td>20.9</td>
</tr>
</tbody>
</table>

\textsuperscript{a}Number of missing cases: 50
total respondent group: between 20 and 29 years of age, .3 percent and .6 percent; 30 and 39, 21.1 percent and 20.9 percent; 40 and 49, 35.6 percent and 35.4 percent; 50 and 59, 27 percent and 26.6 percent and over 60 years of age, 15.9 percent and 16.5 percent. The age trend observed was that the number of faculty members in age categories increased steadily with age up to the 40 to 49 age category, which has the largest number of faculty members. After that the number of faculty members decreased steadily in the categories.

**Degree of the Respondents**

The majority of faculty members, 237 (81.4 percent), among the final sample group had doctorate degrees (see Table 7, p. 151). Of the remaining ones, three (1.0 percent) had Bachelor's degrees; 31 (10.7 percent) had Master's degrees; and 20 (6.9 percent) had other academic qualifications. The majority of faculty members, 296 (81.1 percent) among the total respondent group had doctorate degrees. Of the remaining ones, five (1.4 percent) had Bachelor's degrees; 42 (11.5 percent) had Master's degrees; and 22 (6.0 percent) had other academic qualifications.

There were similarities between the two groups. The following pairs of percentages refer respectively to the academic degrees of faculty members in the final
### TABLE 7
Degree of Respondents

<table>
<thead>
<tr>
<th>Group</th>
<th>Group Total</th>
<th>B.A. or B.S.</th>
<th>M.A. or M.S.</th>
<th>Ph.D. or Ed.D.</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Final Sample</td>
<td>291</td>
<td>100</td>
<td>3</td>
<td>1.0</td>
<td>31</td>
</tr>
<tr>
<td>Total Respondent</td>
<td>365(^a)</td>
<td>100</td>
<td>5</td>
<td>1.4</td>
<td>42</td>
</tr>
</tbody>
</table>

\(^a\)Number of missing cases: 1
sample group and the total respondent group: B.A. or B.S., 1.0 percent and 1.4 percent; M.A. or M.S., 10.7 percent and 11.5 percent; Ph.D. or Ed.D., 81.4 percent and 81.1 percent; and other academic qualifications, 6.9 percent and 6.0 percent.

Length of Service of the Respondents

The majority of the faculty members, 141 (48.6 percent) among the final sample group have served over 15 years as faculty members in the three universities (see Table 8, p. 153). Of the remaining ones, 31 (10.7 percent) have served under five years; 63 (21.7 percent) have served between five and ten years; and 53 (18.3 percent) have served between ten and 15. The majority of the faculty members, 153 (48.4 percent), among the total respondent group have served over 15 years. Of the remaining ones, 34 (10.8 percent) have served under five years; 67 (21.2 percent) between five and ten; and 60 (19 percent) have served between ten and 15 years.

Similarities were observed between the two groups. The following pairs of percentages refer respectively to the length of service of faculty members in the final sample group and the total respondent group: under five years, 10.7 percent and 10.8 percent; between five and ten years, 21.7 percent and 21.2 percent; ten and 15
### TABLE 8
Length of Service of Respondents

<table>
<thead>
<tr>
<th>Group</th>
<th>Group Total</th>
<th>Under 5 yr.</th>
<th>5 to 10 yr.</th>
<th>10 to 15 yr.</th>
<th>Over 15 yr.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Final Sample</td>
<td>290&lt;sup&gt;a&lt;/sup&gt;</td>
<td>100</td>
<td>31</td>
<td>10.7</td>
<td>63</td>
</tr>
<tr>
<td>Total Respondent</td>
<td>316&lt;sup&gt;b&lt;/sup&gt;</td>
<td>100</td>
<td>34</td>
<td>10.8</td>
<td>67</td>
</tr>
</tbody>
</table>

<sup>a</sup>Number of missing cases: 1

<sup>b</sup>Number of missing cases: 50
years, 18.3 percent and 19.0 percent; and over 15 years 48.6 percent and 48.4 percent.

The above comparisons of the final sample group and total respondent group with respect to the five demographic variables show that the two groups were similar, to a very high degree, in terms of percentages of respondents. This points to the fact that the final sample group which was used in the analysis of data represents, to a very high degree, the total respondent group.

SECTION II
Analysis of Data

In this section is presented the analysis of data gathered from faculty members on the variables of leadership behavior and values in Part I of the instrument. This section is divided into two parts. In Part I are presented tests of the main hypotheses and comparison of different methods of determining job satisfaction. In Part II are presented (i) 15 one-way analysis of variance tests of differences between faculty mean scores, (ii) the results of Bartlett-Box's tests for the homogeneity of variances, and (iii) the least-significant multiple comparison post hoc to the analysis of variance.
Part I: Test of the Main Hypotheses

Three of the primary hypotheses were designed to determine faculty job satisfaction by means of discrepancy or deficiency scores. The discrepancy scores were derived by subtracting (a) the real chairperson's leadership behavior from the ideal chairperson's leadership behavior, and (b) the real chairperson's values from the faculty values. The average means of these two sets of discrepancy scores were correlated respectively with the average mean scores of faculty job satisfaction. The research hypotheses were rejected or accepted under the terms of the null hypotheses, that is, the research hypotheses were taken as acceptable only if the nulls were shown to be unacceptable.

Although all the research hypotheses of this study predicted directions and the one-tailed test would have been preferable, the researcher opted for the two-tailed test because it is a more powerful test. For example, the null of a one-tailed test is easier to reject than the null of a two-tailed test because with the former test "there is greater probability of falling into the larger critical region" of the tail (Blalock, 1979, p. 163). In addition, Burke (1954) argues that the distinction between statistical and theoretical (or substantive) models should be taken into consideration
when making a decision on the tail or proper error term. There are cases in which "...appeal to substantive theory may lead to the choice of a proper error term, and this appeal may seem to involve a direct intrusion of substantive theory upon the interpretation" (p. 588).

H1: The lesser the degree of discrepancy between faculty members' perceptions of the desired (ideal) and observed (real) leadership behavior of the chairperson, the greater the degree of faculty job satisfaction.

The implied null hypothesis to be tested was: the degree of discrepancy between the ideal and real chairperson's behavior has no effect on the degree of faculty job satisfaction. To test this null, the average mean score of the discrepancy between real and ideal chairperson's leadership behavior (MDBB) was correlated with the average mean score of the faculty on job satisfaction (MSA). The correlation coefficient was -.4541 (see Table 9, p. 157). The calculated significant level based on a two-tailed test was .0000. The null hypothesis was rejected at a set alpha level of .05. Therefore, the research hypothesis was accepted.

H2: The lesser the degree of discrepancy between faculty members' perceptions of their chairperson's value system and of their own value systems, the greater the degree of faculty job satisfaction.

The implied null hypothesis was: the degree of discrepancy between the perceived value systems of the real
TABLE 9
Average Mean Correlation Coefficients of Faculty Members on the
Variables of the Research Hypotheses H1, H2 and H3
N=291

<table>
<thead>
<tr>
<th>Variable</th>
<th>MDBB</th>
<th>MDBV</th>
<th>MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDBB</td>
<td>1.0000(^a)</td>
<td>-.4613</td>
<td>-.4541</td>
</tr>
<tr>
<td></td>
<td>p=....(^b)</td>
<td>p=.000</td>
<td>p=.000</td>
</tr>
<tr>
<td>MDBV</td>
<td>-.4613</td>
<td>1.0000</td>
<td>.3802</td>
</tr>
<tr>
<td></td>
<td>p=.000</td>
<td>p=....</td>
<td>p=.000</td>
</tr>
<tr>
<td>MSA</td>
<td>-.4541</td>
<td>.3802</td>
<td>1.0000</td>
</tr>
<tr>
<td></td>
<td>p=.000</td>
<td>p=.000</td>
<td>p=....</td>
</tr>
</tbody>
</table>

\(^a\)Coefficient.

\(^b\)Significant level.

MDBB Mean of difference between ideal and real chairperson's leadership behavior.
MDBV Mean of difference between value systems of chairperson and faculty members.
MSA Mean of faculty job satisfaction.
chairperson and the faculty has no effect on the degree of faculty job satisfaction. To test the null, the average mean score of the discrepancy between chairperson and faculty value systems (MDBV) was correlated with the average mean score of the faculty on job satisfaction (MSA). The correlation coefficient was .3802 (see Table 9, p. 157). The calculated significant level based on a two-tailed test was .0000. The null hypothesis was rejected at a set alpha limit of .05. Therefore, the research hypothesis was accepted.

H3: The lesser the degree of discrepancy between faculty members' perceptions of their chairperson's value system and of their own value systems, the lesser the degree of discrepancy between faculty members' desired (ideal) and observed (real) leadership behavior of the chairperson.

The implied null hypothesis was: the degree of discrepancy between the faculty perceptions of their chairperson's value system and of their own value systems has no effect on the degree of discrepancy between the ideal and real leadership behavior of the chairperson. To test this null, the average mean scores of the discrepancy between chairperson and faculty values (MDBV) and between the chairperson's ideal and real leadership behavior (MDBB) were correlated (see Table 9, p. 157). The correlation coefficient was -.4613. The calculated significant level based on the two-tailed
test was .000. The null hypothesis was rejected at the set alpha level of .05. Therefore, the research hypothesis was accepted.

In conclusion, there was failure to reject the research hypotheses. The discrepancy scores correlated significantly with the satisfaction variable.

A number of researchers (Wall and Payne, 1973; Lord, 1963; McNemar, 1958; Werts and Linn, 1970) have pointed to the problems associated with the use of discrepancy or deficiency scores in psychological testing. Wall and Payne (1973) critically analyzed two kinds of problems—the logical and the psychological—that are associated with discrepancy scores and concluded that

the operation of logical and psychological constraints can mean that relationships obtained between deficiency scores and independent variables are no more than an attenuated reflection of the relationships between existing level scores and those independent variables. Additionally, it has been demonstrated that deficiency scores may mask otherwise meaningful relationships (p. 326).

In other words, whenever discrepancy-correlation tests are done only one of the components (the existing or real component) of the discrepancy score actually correlates significantly with the third variable. With regards to the present study, Wall and Payne would contend that: (1) in the case of Hypothesis 1 the ideal leadership behavior of the discrepancy score did not
significantly correlate with, or contributed to, the relationship between the discrepancy score and job satisfaction; and (2) in the case of Hypothesis 2 it was only one of the value components of the value-discrepancy score (the chairperson's values or faculty values) that correlated significantly with job satisfaction.

Wall and Payne suggested that the partial correlation method is a better alternative to the discrepancy method when it comes to measuring psychological attitudes. To test their contention, the two other primary hypotheses (H4 and H5) were tested using partial correlation. A total of four partial correlation tests was done (see Table 10, p. 161). The advantage of this method was that it could directly correlate two variables while controlling for the effect of the third. By examining the partial coefficients obtained from the four tests or relationships, the researcher was able to tell which variable did not significantly correlate with job satisfaction. The four partial correlation coefficients were obtained for: (1) the relationship between the real chairperson's leadership behavior and faculty job satisfaction while controlling for ideal chairperson's behavior; (2) the relationship between ideal chairperson's behavior and faculty job satisfaction while controlling for real chairperson's behavior; (3) the relationship between real
TABLE 10
Partial Correlation Coefficients for the Relationships Between the Five Research Variables
N=291

<table>
<thead>
<tr>
<th>Variable 1&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Variable 2</th>
<th>Controlling for</th>
<th>Coeff.</th>
<th>df</th>
<th>p&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real chairperson's leadership behavior</td>
<td>Faculty job satisfaction</td>
<td>Ideal chairperson's leadership behavior</td>
<td>.5685</td>
<td>288</td>
<td>.000</td>
</tr>
<tr>
<td>Real chairperson's values</td>
<td>Faculty job satisfaction</td>
<td>Faculty values</td>
<td>.4872</td>
<td>288</td>
<td>.000</td>
</tr>
<tr>
<td>Ideal chairperson's leadership behavior</td>
<td>Faculty job satisfaction</td>
<td>Real chairperson's leadership behavior</td>
<td>.0015</td>
<td>288</td>
<td>.979</td>
</tr>
<tr>
<td>Faculty values</td>
<td>Faculty job satisfaction</td>
<td>Real chairperson's leadership behavior</td>
<td>.0563</td>
<td>288</td>
<td>.339</td>
</tr>
</tbody>
</table>

<sup>a</sup>The unit of analysis is the average mean score on each variable.

<sup>b</sup>Probabilities are based on 2-tailed significant level.
chairperson's values and faculty job satisfaction while controlling for faculty values; and (4) the relationship between faculty values and faculty job satisfaction while controlling for real chairperson's values. In these four cases or relationships the independent variables were, respectively, the ideal chairperson's leadership behavior, the real chairperson's leadership behavior, the real chairperson's values and faculty values. The dependent variable in each case was faculty job satisfaction. Since only one variable was controlled for each partial correlation test, the following first-order partial ($r_{ij.k}$) formula was used (Blalock, 1979, p. 459): 

$$r_{ij.k} = \frac{rij - (rik)(rjk)}{\sqrt{1-rik^2} \sqrt{1-rjk^2}}.$$ 

Table 10 indicates the partial coefficients for the four relationships and the variables whose effects were controlled. The two hypotheses (H4 and H5) used for testing these relationships were constructed in such a way that there was no mention of the variables whose effects were controlled. This is because the controlled variables did not participate in any significant sense in the interaction between the other two variables. Of the four relationships in Table 10 only the first two were tested—

(1) real chairperson's behavior and faculty job satisfaction while controlling for ideal chairperson's behavior; and

(2) real chairperson's values and faculty job satisfaction while controlling for faculty values. Therefore,
there were only two hypotheses—H4 on the first relation—and H5 on the second.

The hypothesis on the third relationship—ideal chairperson's behavior and faculty job satisfaction—was not constructed and tested because Wall and Payne's challenge to the use of discrepancy scores implied the use of real, existing scores in the determination of job satisfaction. This relationship dealt with the ideal chairperson's behavior. The hypothesis on the fourth relationship—faculty values and faculty job satisfaction—was not constructed and tested because both variables dealt only with the faculty and so the relationship had no implications for chairperson's values or chairperson's leadership behavior.

**H4:** The greater the degree of faculty members' perceptions of the leadership behavior of their real chairperson, the greater the degree of faculty job satisfaction.

The effect of ideal leadership behavior was controlled in the relationship in H4. The implied null hypothesis which was tested was: There is no relationship between the degree of faculty perception of real chairperson's behavior and the degree of faculty job satisfaction. The partial coefficient, which was calculated while controlling for ideal leadership behavior, was .5685 (see Table 10). The average mean scores were used in the computation of the partial correlation
coefficient. The calculated significant level based on a two-tailed test was .000. The null hypothesis was rejected at a set alpha level of .05. Therefore, the research hypothesis was accepted.

H5: The greater the degree of faculty members' perceptions of their real chairperson's value system, the greater the degree of faculty job satisfaction.

The effect for faculty values was controlled in the relationship in H5. The implied null hypothesis was: there is no relationship between the degree of faculty perception of real chairperson's values and the degree of faculty job satisfaction. The partial correlation coefficient, which was calculated while controlling for faculty mean value scores, was .4872. The calculated significant level based on a two-tailed test was .000. The null hypothesis was rejected at a set alpha level of .05. Therefore, the research hypothesis was accepted.

For both the discrepancy and partial correlation methods, all the research hypotheses were accepted. To find out which method yielded coefficients that were more accurately and meaningfully descriptive of the relationship between job satisfaction and the independent variables, the coefficients yielded by the two methods were compared. The results are given in Table 11, p. 165. The results of a third method of correlation—Pearson product-moment correlation—are included in the
<table>
<thead>
<tr>
<th>Variable 1</th>
<th>Variable 2</th>
<th>Controlling for (in case of partial correlation)</th>
<th>Correlation Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean of difference between ideal and real chairperson's leadership behavior (MDBB)</td>
<td>Faculty job satisfaction</td>
<td></td>
<td>Discrepancy Partial Pearson</td>
</tr>
<tr>
<td>Mean of difference between value systems of real chairperson and faculty members (MDBV)</td>
<td>Faculty job satisfaction</td>
<td></td>
<td>-.4541</td>
</tr>
<tr>
<td>Mean of ideal chairperson's leadership behavior</td>
<td>Faculty job satisfaction</td>
<td>Real chairperson's leadership behavior</td>
<td>.0015 .1200</td>
</tr>
<tr>
<td>Mean of real chairperson's leadership behavior</td>
<td>Faculty job satisfaction</td>
<td>Ideal chairperson's leadership behavior</td>
<td>.5685 .5770</td>
</tr>
<tr>
<td>Mean of real chairperson's values</td>
<td>Faculty job satisfaction</td>
<td>Faculty values</td>
<td>.4872 .5148</td>
</tr>
<tr>
<td>Mean of faculty values</td>
<td>Faculty job satisfaction</td>
<td>Real chairperson's values</td>
<td>.0563 .1982</td>
</tr>
</tbody>
</table>
table. The Pearson scores were used for the further comparison of the discrepancy method with another more direct method.

The first row in Table 11 indicates the relationship between the variables in H1 and the method (discrepancy-correlation) that was used in determining job satisfaction. The discrepancy coefficient for the mean difference between real and ideal chairperson's leadership behavior and faculty job satisfaction was -.4541. The question raised by Wall and Payne is whether both components of the discrepancy score (ideal and real behavior) contributed to this significant coefficient.

The partial correlation scores in rows 3 and 4 of Table 11 helped to answer this question. Row 3 of the table shows that the coefficient for the relationship between ideal chairperson's leadership behavior and faculty job satisfaction is very close to zero (.0015). But Row 4 shows that the correlation for the relationship between the mean of real leadership behavior and faculty job satisfaction is quite significant (.5685). Thus the real leadership behavior correlated significantly with faculty job satisfaction. This shows that of the two chairperson's leadership behavior components in Row 1 (real and ideal components),
the contribution of ideal leadership behavior to the relationship with satisfaction is negligible. It is the real behavior of the chairperson that almost completely contributed to the relationship with job satisfaction. This finding is in agreement with the contention of Wall and Payne that the discrepancy or deficiency coefficient may reflect no more than the relationship between the existing or real variable and the third variable.

Pearson correlation scores were used to further confirm Wall and Payne's contention (see Table 11). The coefficient for Pearson correlation for the relationship between real chairperson's behavior and faculty job satisfaction (Row 4) was .5770, but the coefficient for Pearson correlation between ideal chairperson's behavior and faculty job satisfaction (Row 3) is closer to zero (.1200). This shows that ideal leadership behavior correlated insignificantly with job satisfaction. This serves as further evidence that the ideal component of the behavior-discrepancy score contributed very little to the relationship with job satisfaction. It is the real behavior that correlated with job satisfaction in any significant sense. This finding further confirms Wall and Payne's contention.
The second row in Table 11 indicates the relationship between the variables in H2 and the method (discrepancy-correlation) that was used in determining job satisfaction. The discrepancy coefficient for the mean difference between chairperson's values and faculty values was .3802. In this case the discrepancy is not between real and ideal scores but between two real scores--those between the values of real faculty and the real chairperson. Although the coefficient for the relationship between discrepancy in values and job satisfaction in Row 2 was significant, the question is: which of the two components of the discrepancy score--chairperson's values or faculty values--contributed more significantly to this relationship? Row 6 shows that the partial coefficient for the relationship between faculty values and job satisfaction is very low (.0563). But the partial coefficient for the relationship between real chairperson's values and job satisfaction (Row 5) is fairly significant (.4872). This shows that of the two value components of the value-discrepancy score, it is the real chairperson's values that contributed in any significant sense to the relationship. The contribution of faculty values was negligible. This finding is in agreement with Wall and Payne's contention that only one of the components of a discrepancy score contributed to the relationship.
Pearson coefficient scores were used to further confirm the above finding. The Pearson coefficient for the relationship between real chairperson's values and faculty job satisfaction was .5148 (Row 5), while that between faculty values and faculty job satisfaction was .1982 (Row 6). This again shows that faculty values contributed very little to the relationship between the value-discrepancy score and job satisfaction in Row 2. It is the real chairperson's values that correlated with job satisfaction in any significant sense.

**Summary of the Test of the Five Primary Hypotheses**

The analysis of the test of the five primary hypotheses did not support the null hypotheses. Therefore, all the five main null hypotheses were rejected at the set alpha level of .05. The following three methods of determining job satisfaction were used in the test: discrepancy-correlation, partial correlation and Pearson correlation. The three were compared in order to find out which one represented a better way of determining job satisfaction. The comparison revealed serious problems with the discrepancy method which was used to test H1, H2 and H3. The major problem with the discrepancy score was that one of the component parts of each discrepancy coefficient was not reflected in any significant sense in the relationship between the two independent variables.
and the job satisfaction variable. It was observed that the mean of the ideal leadership behavior in H1 was close to zero and thus did not contribute to the relationship between the independent and dependent variables in any significant sense. Likewise, the mean of faculty values was so low that it did not contribute to the relationship in H2 in any significant sense. Therefore, it was concluded that the rejection of the null hypothesis in H1 and H2 was not due to the discrepancy between the two independent variables. The tests of H4 and H5 also rejected the null hypotheses. But this rejection of the null was not an endorsement of the discrepancy method. Analysis of the means of the variables in H4 and H5 confirmed the fact that only the scores of the real chairperson's leadership behavior and real chairperson's values contributed in a significant sense to the relationship with job satisfaction.

So it was concluded that the scores of the real chairperson's behavior and faculty values in H1 and H2 were responsible for the rejection of the null hypotheses. An analysis of Pearson correlation scores further confirmed this conclusion.

Overall, the results showed that faculty perceptions of the leadership behavior and values of chairpersons were significantly related to their job satisfaction.
What the rejection of the null of H3 shows is that there is a significant relationship between the variables of values and leadership behavior in departmental operations. These results could be interpreted to imply that in universities where departments enjoy relative autonomy as governing and academic units, the leadership performance and value system of the chairperson can be an important source from which faculty members can derive their job satisfaction.

After analyzing the five hypotheses, the conclusion was that the more direct methods of correlation—partial and Pearson—represented a more accurate and meaningful description of the relationship between job satisfaction and other variables.

**Part II: One-Way Analysis of Variance Tests**

Part II deals with (i) a series of one-way analysis of variance tests of differences between faculty mean scores; (ii) the results of Bartlett-Box's test for the homogeneity of variances; and (iii) a series of least-significant multiple comparison tests—the post hoc test used in this study to the analysis of variance.

The analysis of variance tests involved the research variables and the demographic variables of this study. The five research variables were: ideal chairperson's leadership behavior, real chairperson's
leadership behavior, real chairperson's values, faculty values and faculty job satisfaction. The following were the five demographic variables and their respective demographic groups: (1) sex: male and female; (2) rank: instructors, assistant professors, associate professors and professors; (3) age: 20 to 29 years, 30 to 39, 40 to 49, 50 to 59 and over 60 years; (4) degree: B.A. or B.S., M.A. or M.S., Ph.D. or Ed.D., and other academic qualifications; (5) length of service: under five years, five to ten, ten to 15 and over 15 years.

The one-way analysis of variance was used to test for significant difference between faculty mean scores on each of the five demographic variables with respect to the following three research variables: (a) real chairperson's behavior, (b) real chairperson's values and (c) faculty job satisfaction. The results of the analysis of variance tests for the two other research variables of this study--ideal leadership behavior and faculty values--are not reported here because the analysis of the results of primary hypotheses 4 and 5 showed that these two research variables did not contribute significantly to the determination of faculty job satisfaction. Besides the issue of their non-significant contribution to the determination of faculty job satisfaction, there was also a statistical consideration. The Bartlett-Box F tests for the
homogeneity of variances did show violations of homogeneity in some cases involving ideal leadership behavior and faculty values. Therefore, the analysis of variance tests were not reported for the two variables.

Since each of the five demographic variables (sex, rank, age, degree and length of service) was tested with respect to the three research variables of real chairperson's leadership behavior, real chairperson's values and faculty job satisfaction, a total of 15 analysis of variance tests was done. These analysis of variance tests were used to determine whether there were significant differences between the demographic groups with respect to the real chairperson's behavior, real chairperson's values and faculty job satisfaction. The plan of the 15 tests is shown in Table 12, p. 174. The demographic variables and their demographic groups are in the first column. The three research variables are in the other three columns. The first row indicates the two sex variables (male and female). The two demographic variables were tested with respect to the three research variables of real chairperson's behavior (Column 2), real chairperson's values (Column 3) and faculty job satisfaction (Column 4). Thus there were three analysis of variance tests—Test 1, Test 2, and Test 3, each
<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Research Variables</th>
<th>Real Chair-person's Behavior</th>
<th>Real Chair-person's Values</th>
<th>Faculty Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td>(1)(^a) 2 groups</td>
<td>(2) 2 groups</td>
<td>(3) 2 groups</td>
</tr>
<tr>
<td>Male and female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank</td>
<td></td>
<td>(4) 4 groups</td>
<td>(5) 4 groups</td>
<td>(6) 4 groups</td>
</tr>
<tr>
<td>Instructor, Assistant Professor, Associate Professor and Professor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>(7) 5 groups</td>
<td>(8) 5 groups</td>
<td>(9) 5 groups</td>
</tr>
<tr>
<td>20-29, 30-39, 40-49, 50-59 and over 60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree</td>
<td></td>
<td>(10) 4 groups</td>
<td>(11) 4 groups</td>
<td>(12) 4 groups</td>
</tr>
<tr>
<td>Bachelor's, Master's, Doctorate and Other</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of Service</td>
<td></td>
<td>(13) 4 groups</td>
<td>(14) 4 groups</td>
<td>(15) 4 groups</td>
</tr>
<tr>
<td>Under 5 years, 5 to 10, 10 to 15 and over 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)The numbers in parentheses refer to the chronological order of the analysis of variance tests.
involving two groups. The second row indicates the demographic variable of rank. The four demographic groups under rank are instructor, assistant professor, associate professor and professor. These four groups were tested with respect to the three research variables of real chairperson's behavior (second column), real chairperson's values (third column), and faculty job satisfaction (fourth column). Thus there were three analysis of variance tests--Test 4, Test 5 and Test 6, each involving four groups. The tests of the three demographic variables of age, degree and length of service are numbered 7 through 15.

Fifteen null hypotheses could have been constructed for the 15 analysis of variance tests. But since the 15 tests were regarded as subhypotheses of the five primary hypotheses of the study and since the structures of the 15 subhypotheses were similar, the following general null hypothesis was constructed to represent all of them.

H01. There are no differences in perceptions between demographic groups of faculty members with respect to (a) real chairperson's leadership behavior, (b) real chairperson's value system, and (c) faculty job satisfaction.

The analysis of the test of this null hypothesis is divided into five sections. Each section deals with one of the five demographic variables. The results of the
15 tests are given in Tables 13-17. The means, F ratios and calculated probabilities are given for each research variable. The rejection or acceptance of all nulls was based on a two-tailed test at a set significant level of .05. The post hoc test to the analysis of variance was the least-significant multiple comparison test. The results of the post hoc tests are also indicated on the tables. The alpha level for the least-significant test was .05.

**Sex of the Respondents**

The three analysis of variance tests dealing with the sex of the respondents were done respectively with respect to the real chairperson's behavior, real chairperson's values and faculty job satisfaction (see Table 12). There was significant difference at the .05 level between male and female faculty members with respect to all three variables. Therefore, the null hypothesis was rejected in each of the three cases. Since there were only two groups under each sex variable, the least-significant test was not necessary as post hoc for the confirmation of which two groups were significantly different from each other.

**Ranks of the Respondents**

The three analysis of variance tests dealing with the ranks of faculty members were done with respect to
TABLE 13
Results of One-Way Analysis of Variance Tests on Sex with Respect to Real Chairperson's Behavior,
Real Chairperson's Values and Faculty Job Satisfaction
\(df=290\)

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Research Variables</th>
<th>(\bar{X})</th>
<th>(F)</th>
<th>(P)</th>
<th>(\bar{X})</th>
<th>(F)</th>
<th>(P)</th>
<th>(\bar{X})</th>
<th>(F)</th>
<th>(P)</th>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Sex</td>
<td>Real Chairperson's Behavior</td>
<td></td>
<td></td>
<td></td>
<td>Real Chairperson's Values</td>
<td></td>
<td></td>
<td></td>
<td>Faculty Job Satisfaction</td>
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</tr>
<tr>
<td></td>
<td>(X)</td>
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<td></td>
<td>(X)</td>
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<td>(P)</td>
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<td></td>
<td></td>
<td>(P)</td>
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<td>3.5562</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>3.1034</td>
<td>3.2167</td>
<td>3.3337</td>
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</table>
TABLE 14  
Results of One-Way Analysis of Variance and Least-Significant Difference  
Post Hoc Tests on Rank with Respect to Real Chairperson's Behavior,  
Real Chairperson's Values and Job Satisfaction  
df=290  

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Real Chairperson's Behavior</th>
<th>Real Chairperson's Values</th>
<th>Faculty Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{X} )</td>
<td>( F )</td>
<td>( P )</td>
</tr>
<tr>
<td>Rank</td>
<td>0.857</td>
<td>0.4640</td>
<td>2.547</td>
</tr>
<tr>
<td>Instructor</td>
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<td>( \text{3.7667} )</td>
<td>3.1190</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>3.1799</td>
<td>( \text{3.2303}^a )</td>
<td>3.3872b</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>3.2773</td>
<td>( \text{3.3574} )</td>
<td>3.4294c</td>
</tr>
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<td>Professor</td>
<td>3.3159</td>
<td>( \text{3.4788}^a )</td>
<td>3.6410bc</td>
</tr>
</tbody>
</table>

The letters "a," "b," and "c" indicate results of Least-Significant Difference tests at the .05 level.  

*The two "a's" indicate that assistant professors and professors are significantly different.  
*The two "b's" indicate that assistant professors and professors are significantly different.  
*The two "c's" indicate that associate professors and professors are significantly different.
TABLE 15
Results of One-Way Analysis of Variance and Least-Significant Difference Post Hoc Tests on Age with Respect to Real Chairperson's Behavior, Real Chairperson's Values and Job Satisfaction
df=290

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Research Variables</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Real Chairperson's Behavior</td>
</tr>
<tr>
<td></td>
<td>X F P</td>
</tr>
<tr>
<td>Age</td>
<td>0.556 .6944</td>
</tr>
<tr>
<td>20 to 29</td>
<td>3.5500</td>
</tr>
<tr>
<td>30 to 39</td>
<td>3.2104</td>
</tr>
<tr>
<td>40 to 49</td>
<td>3.3274</td>
</tr>
<tr>
<td>50 to 59</td>
<td>3.2979</td>
</tr>
<tr>
<td>Over 60</td>
<td>3.2739</td>
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</table>

The letter "a" indicates results of Least-Significant Difference tests: the two "a's" indicate that the age groups 30 to 39 and over 60 are significantly different at the .05 level.
TABLE 16
Results of One-Way Analysis of Variance and Least-Significant Difference Post Hoc Tests on Degree with Respect to Real Chairperson's Behavior, Real Chairperson's Values and Job Satisfaction
df=290

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Research Variables</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Real Chairperson's Behavior</td>
<td>Real Chairperson's Values</td>
<td>Faculty Job Satisfaction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$\bar{X}$</td>
<td>$F$</td>
<td>$P$</td>
<td>$\bar{X}$</td>
</tr>
<tr>
<td>Degree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor's</td>
<td>3.1754</td>
<td>.678</td>
<td>.5662</td>
<td>3.4500</td>
</tr>
<tr>
<td>Master's</td>
<td>3.4049</td>
<td>3.6115a</td>
<td>.5662</td>
<td>3.6168</td>
</tr>
<tr>
<td>Doctorate</td>
<td>3.2657</td>
<td>3.3686a</td>
<td>.5662</td>
<td>3.6168</td>
</tr>
<tr>
<td>Other</td>
<td>3.2861</td>
<td>3.5043</td>
<td>.5662</td>
<td>3.6214</td>
</tr>
</tbody>
</table>

The letter "a" indicates results of Least-Significant Difference tests: the two "a's" indicate that the Master's and Doctorate degree holders are significantly different at the .05 level.
TABLE 17
Results of One-Way Analysis of Variance and Least-Significant Difference Post Hoc Tests on Length of Service with Respect to Real Chairperson's Behavior, Real Chairperson's Values and Job Satisfaction

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>Research Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Real Chairperson's Behavior</td>
</tr>
<tr>
<td></td>
<td>(\bar{X})</td>
</tr>
<tr>
<td>Length of Service</td>
<td>(\bar{X})</td>
</tr>
<tr>
<td>Under 5 years</td>
<td>3.2706</td>
</tr>
<tr>
<td>5 to 10</td>
<td>3.2332</td>
</tr>
<tr>
<td>10 to 15</td>
<td>3.3111</td>
</tr>
<tr>
<td>Over 15</td>
<td>3.3080</td>
</tr>
</tbody>
</table>

The letters "a" and "b" indicate results of Least-Significance Difference tests at the 0.05 level.

\(^a\)The two "a's" indicate that groups under 5 and over 15 years are significantly different.

\(^b\)The two "b's" indicate that groups under 5 and over 15 years are significantly different.
to the real chairperson's behavior, real chairperson's values and faculty job satisfaction (see Table 14). No significant difference was observed between the four ranks at the .05 level with respect to real chairperson's behavior. The least-significant difference multiple comparison test also showed that no two groups were significantly different with respect to real chairperson's behavior. In the analysis of variance test there was no observed significant difference between ranks with respect to real chairperson's values. However, the least-significant difference test showed that assistant professors and professors differed significantly in their perceptions of their real chairperson's values. The analysis of variance test showed a significant difference between ranks with respect to faculty job satisfaction. The least-significant multiple comparison test showed that professors were significantly different from assistant professors and from associate professors with respect to their job satisfaction.

**Age of Respondents**

The three analysis of variance tests dealing with the age of the respondents were done respectively with respect to the real chairperson's leadership behavior, real chairperson's values and faculty job satisfaction (see Table 15). The analysis of variance test
showed no significant difference between age groups with respect to their perceptions of the real chairperson's behavior and real chairperson's values. The least-significant tests also showed that no two age groups were significantly different with respect to real chairperson's behavior and real chairperson's values. There was no significant difference between age groups with respect to faculty job satisfaction but the least-significant difference test showed that, with respect to job satisfaction, there was significant difference between faculty members over 60 years of age and those between 30 and 39 years of age.

**Degrees of Respondents**

The three analysis of variance tests dealing with the academic degree of the respondents were done respectively with respect to the real chairperson's behavior, real chairperson's values and faculty job satisfaction (see Table 16). The test showed no significant difference between degree groups with respect to real chairperson's behavior. The least-significant difference test also showed that with respect to real chairperson's behavior no two degree groups were significantly different. The analysis of variance test showed no significant difference between degree groups with respect to real chairperson's values. However, the
least-significant difference test showed significant difference between M.A. and Ph.D. level faculty members with respect to their real chairperson's values. The analysis of variance test showed no significant difference between degree groups with respect to faculty job satisfaction. The least-significant post hoc test also showed that no two degree groups were significantly different with respect to faculty job satisfaction.

**Length of Service of Respondents**

The three analysis of variance tests dealing with the length of service of the respondents were done respectively with respect to real chairperson's behavior, real chairperson's values and faculty job satisfaction (see Table 17). The analysis of variance test showed no significant difference between the four length of service groups with respect to real chairperson's behavior. The least-significant difference comparison test also showed that no two groups were significantly different with respect to real chairperson's behavior. The analysis of variance test showed that there was no significant difference between any two length of service groups with respect to real chairperson's values. However, the least-significant difference test showed that faculty members who have served under five years and those who have served over 15 years were significantly different with
respect to their real chairperson's values. The analysis of variance test showed that, with respect to faculty job satisfaction, there was no significant difference between length of service groups. However, the least-significant multiple comparison test showed that with respect to faculty job satisfaction, faculty members who have served under five years and those who have served over 60 years were significantly different.

**Summary of the 15 Analysis of Variance Tests**

The results of the three analysis of variance tests dealing with the sex of the respondents showed that male and female members differed significantly in job satisfaction and in their perceptions of the leadership behavior and value systems of their real chairpersons. These results could be interpreted to imply that the leadership behavior and values of the real chairperson are such that they do not equally meet the needs of both sexes. This in turn might be due to the significant difference between the job satisfaction of both sexes. Table 13 indicates that the scores of the male faculty are higher than those of the female faculty on all three variables. A change in leadership style, policies and values of the chairpersons is needed before both sex groups can have similar perceptions of their chairpersons.
The chairpersons need to gather more information on how to improve their relationship with female faculty members.

The results of the three analysis of variance tests of significance between groups under ranks of faculty members showed that the four groups did not differ significantly with respect to real chairperson's behavior and real chairperson's values. However, with respect to real chairperson's values, the follow-up least-significant difference test showed that there was significant difference between the perceptions of assistant professors and professors. Table 14 indicates that the mean score of the professors is higher than that of assistant professors on the real chairperson's value scale. This could be interpreted to mean that the assistant professors would like to see a change in the value systems of the chairperson. The lower score of the assistant professors might be due to the fact that they are newer on the staff and it would take time to get used to the way the chairperson manages. The chairpersons need to find out which aspects of their value system are not favourably perceived by the assistant professors. The analysis of variance test showed significant difference in the job satisfaction of rank groups. The least-significant difference test showed
that the significant differences were between assistant professors and professors and between associate professors and professors. This finding could mean that the chairpersons need to examine their relationship with different ranks so as to determine what changes to make in order to adequately satisfy the needs of all rank groups.

The analysis of variance tests showed no significant difference in age group perceptions with respect to real chairperson's behavior, real chairperson's values and job satisfaction (Table 15). However, the post hoc test pointed to a significant difference between the age groups 30 to 39 years and over 60 years with respect to their job satisfaction. The average mean of the faculty over 60 years (3.6610) was higher than that of those between 30 and 39 (3.3972). This difference in mean might be the cause of the difference in satisfaction. This finding points to the fact that the chairperson needs to find a way to meet the needs of faculty members at the assistant and associate professorial levels. It seems that the older faculty have more favourable perception of the chairperson and thus are more satisfied.

The analysis of variance test showed no significant difference between degree groups with respect to real
chairperson's behavior, real chairperson's values and
college job satisfaction (see Table 16). The least-
significant difference test, however, showed that there
was significant difference between M.A. and Ph.D.
degree holders with respect to real chairperson's
values. The mean of the Master's degree holders
(3.6115) is higher than that of the Ph.D. holders
(3.3686). The chairpersons need to communicate more
with the Ph.D. holders to find out the reason for the
group's low perception of their performance.

The analysis of variance tests showed no
significant difference between length of service groups
with respect to real chairperson's behavior, real
chairperson's values and faculty job satisfaction (see
Table 17). But the post hoc test showed significant
difference between faculty members who have served under
five and those who have served over 15 years with respect
to real chairperson's values and job satisfaction.
The average mean scores of those who have served over
15 years were higher on both variables than the scores
of those who have served under five years. One
interpretation of this is that the longer length of
service might have led to more favorable perceptions of
the chairperson's values, and also to more satisfaction
with his performance. The under-five group needs more
time to adjust and so the chairperson needs to obtain more information on how to meet their needs.
CHAPTER V
SUMMARY, DISCUSSION AND RECOMMENDATIONS

Introduction

This chapter consists of three sections. The first section consists of summary descriptions of the problem, the theory, the derivation of the hypotheses from the theory and the methodology. The second section consists of a discussion of the significant findings of the study and their implications for educational administration. The third section gives general recommendations for further research.

Summaries of the Problem, Theory and Limitations

The major purpose of the study was to determine faculty job satisfaction with respect to: (a) the desired (ideal) and observed (real) leadership behavior of the chairperson and (b) the value systems of the chairperson and the faculty. The research problem consisted of the following two questions: (a) how significant is the effect of the degree of discrepancy between the desired (ideal) and observed (real) behavior of the department chairperson on faculty job satisfaction?
satisfaction? (b) What is the effect of the degree of discrepancy between faculty value systems and faculty perceptions of the chairperson's value system on faculty job satisfaction?

The first secondary purpose was to compare the use of deficiency or discrepancy scores with the use of more direct methods—partial and Pearson correlation—in order to find out which method was a better determinant of job satisfaction. The purpose, in other words, was to find out which method yielded coefficients that represented a more accurate and meaningful description of the relationship between job satisfaction and the two independent variables. The investigation was undertaken as a result of certain logical and psychological problems which, according to Wall and Payne (1973), are associated with discrepancy scores. They suggested that these two kinds of problems point to the fact that the relationships obtained between discrepancy scores and, say, an independent variable, are no more than a reflection of the relationships between existing or real scores and that independent variable. Thus the ideal component of the discrepancy score plays a negligible role in the relationship. This makes the use of discrepancy scores to be redundant.
The study was centered around Locke's (1976) value theory and Locke's (1969) method of determining job satisfaction. According to Locke, "it is the (perceived) job satisfaction in relation to the individual's values that is the most direct determinant of job satisfaction" (Locke, 1976, p. 1304). Locke used a value-percept model to determine job satisfaction. The model is based on the perceived relationship between what one wants from one's job and what one perceives it as offering (Locke, 1969, p. 316). The calculated discrepancy between what one desires and what one actually gets is used to predict job satisfaction.

Three of the main hypotheses (H1, H2 and H3) of this study were derived from Locke's theory and his discrepancy method was used for testing them. The hypotheses of this study dealt with values as well as the leadership behavior of the chairperson. The conceptual logic behind the discrepancy method is appealing because it implies self-assessment of an existing emotional state based on the individual's conception of the ideal. Two other primary hypotheses (H4 and H5) were tested using Pearson and partial correlations. The results were compared with the results of the discrepancy method. The purpose was to find out which method produced coefficients that more accurately
and meaningfully described the relationship between job satisfaction and the other variables.

The second secondary purpose of the study dealt with the significant differences between demographic groups of faculty members. To get more insight into the relationship between the demographic variables of sex, rank, age, degree and length of service and each of the research variables of chairperson's leadership behavior, chairperson's real values and faculty job satisfaction, several analysis of variance and post hoc tests were done. The findings provided information on significant differences in perceptions between the different demographic groups with respect to the three research variables. The analysis of variance tests were done in terms of the null hypotheses (H01). The results of the analysis of variance tests for two of the research variables--chairperson's ideal leadership behavior and faculty values--were not reported because the two variables were not included in Hypotheses 4 and 5, and also, because the Bartlett-Box F test indicated violations of the homogeneity of variances in some of the tests that involved them.

The data for the statistical tests were gathered by means of an instrument consisting of 54 items on five research variables and five items on the demographic or
personal variable (see Appendix A). The research variables were: ideal chairperson's leadership behavior, real chairperson's leadership behavior, real chairperson's values, faculty values and faculty job satisfaction. The five demographic variables and the demographic groups under them were: sex (male and female); rank (instructors, assistant professors, associate professors and professors); age (20 to 29 years, 30 to 39, 40 to 49, 50 to 59 and over 60 years); degree (B.A. or B.S., M.A. or M.S., Ph.D. or Ed.D. and other academic qualifications); and length of service (under 5 years, 5 to 10 years, 10 to 15, and over 15 years). The subjects were asked to indicate their perceptions of the items on the research variables. Each item was followed by two five-point Likert-type scales—one for the ideal and one for the real (in the case of the leadership behavior variable) and, one scale each for the value system of the faculty and the real chairperson (in the case of the value variable). The job satisfaction scale was followed by one five-point Likert-type scale (see Appendix A).

The population of the study was 926. The overall response rate was 39.5 percent (366 respondents). For the purpose of analysis the respondents were divided into two groups--the total respondent group and the
final sample group. The total respondent group consisted of all the 366 faculty members who returned the instruments. The final sample group consisted of only those 291 respondents (31.4 percent of the population) who completed all sections of the instrument. Since the objectives of the study could be satisfactorily met by analysis of complete sets of responses, the 75 incomplete instruments were not included in the final sample used for testing the hypotheses.

The literature on the chairperson covered the nature and responsibilities of his job and the relationship between him and the faculty. There was an extensive literature review on the department chairperson and on the main theories of job satisfaction and leadership behavior. The job satisfaction theories covered (1) Process Theories—Expectancy Theories, Need-Satisfaction Theories and Value-Satisfaction Theories; and (2) Content Theories. The leadership behavior review covered the main approaches to leadership behavior: the trait approach, the group approach and the trait-situation approach. All the assumptions on faculty job satisfaction and the chairperson's leadership behavior were based on theoretical and empirical data and the findings discussed in the literature review.
The study was limited to the full-time faculty members in three state universities each with a student enrollment of at least 10,000. Each of these institutions is state-supported and due to its decentralized pattern of governance, its academic departments enjoy relative autonomy from each other and from the central administration. Additional limitations pointed to the fact that only faculty members completed the instrument and that the researcher had no control over the respondents and the way they decided to respond to the items.

Statement of the Hypotheses

There were five main research hypotheses of the study. The first three—H1, H2 and H3—dealt with the determination of faculty job satisfaction by use of discrepancy scores while the last two—H4 and H5—dealt with the use of Pearson and partial correlations to determine job satisfaction. In the case of H4 the effect of ideal leadership behavior was controlled and in the case of H5 the effect of faculty values was controlled. There was one null hypothesis (H01) dealing with significant differences between average mean scores of the five demographic groups. The analysis of all the hypotheses were done in terms of the null.
The following were the five main hypotheses:

H1: The lesser the degree of discrepancy between faculty members' perceptions of the desired (ideal) and observed (real) leadership behavior of the chairperson, the greater the degree of faculty job satisfaction.

H2: The lesser the degree of discrepancy between faculty members' perceptions of their chairperson's value system and of their own value systems, the greater the degree of faculty job satisfaction.

H3: The lesser the degree of discrepancy between faculty members' perceptions of their chairperson's value system and of their own value systems, the lesser the degree of discrepancy between faculty members' desired (ideal) and observed (real) leadership behavior of the chairperson.

H4: The greater the degree of faculty members' perceptions of the leadership behavior of their real chairperson, the greater the degree of faculty job satisfaction.

H5: The greater the degree of faculty members' perceptions of their real chairperson's value system, the greater the degree of faculty job satisfaction.

The following was the null hypothesis for the analysis of variance tests:

H01: There are no differences in perceptions between demographic groups of faculty members with respect to (a) real chairperson's leadership behavior; (b) real chairperson's value system, and (c) faculty job satisfaction.

Fifteen analysis of variance tests were done using the above general null hypothesis. In each case the null dealt with only the demographic groups and research variables whose relationships were being measured. The
following were the five demographic variables and the groups under each variable: (1) sex (male and female); (2) rank (instructors, assistant professors, associate professors, and professors); (3) age (20 to 29 years, 30 to 39, 40 to 49, 50 to 59 and over 60 years); (4) degree (B.A. or B.S., M.A. or M.S., Ph.D. or Ed.D., and other academic qualifications); and (5) length of service (under 5 years, 5 to 10, 10 to 15 and over 15 years).

To test for significant difference between group means, the least-significant difference post hoc tests were done after each of the 15 analysis of variance tests.

Summary and Comparison of Demographic Data

The final sample of the study was 925. The total respondent group consisted of 366 respondents (39.5 percent of the population). The total respondent group included both respondents who completed all sections of the instrument and those who did not. The final sample (31.4 percent of the population) included only respondents who completed all sections of the instrument. This final sample consisted of 291 respondents. Only the final sample was used in the testing of the hypotheses.
The demographic profiles of both groups were compared in order to determine whether the final sample was representative of the total respondent group. Substantial similarities were found. Among the sex groups, the final sample was 85.9 percent male and 14.1 percent female while the total respondent group was 86.1 percent male and 13.9 percent female. The following pairs of percentages refer respectively to the ranks of faculty members in the final sample group and the total respondent group: professors 50.2 percent and 50.7 percent; associate professors 34.7 percent and 33.4 percent; assistant professors 14.1 percent and 14.5 percent; and instructors 1.0 percent and 1.4 percent. The following pairs of percentages refer respectively to the age of faculty members in the final sample group and the total respondent group: between 20 and 29 years of age, .3 percent and .6 percent; 30 and 39, 21.1 percent and 20.9 percent; 40 and 49, 35.6 percent and 35.4 percent; 50 and 59, 27 percent and 26.6 percent, and over 60 years of age, 15.9 percent and 16.5 percent. The following pairs of percentages refer respectively to the academic degrees of faculty members in the final sample group and the total respondent group: B.A. or B.S., 1.0 percent and 1.4 percent; M.A. or M.S., 10.7 percent and 11.5 percent; Ph.D. or Ed.D., 81.4 percent
and 81.1 percent; and other academic qualifications, 6.9 percent and 6.0 percent. The following pairs of percentages refer respectively to the length of service of faculty members in the final sample group and the total respondent group: under 5 years, 10.7 percent and 10.8 percent; between 5 and 10 years; 21.7 percent and 21.2 percent; 10 and 15 years, 18.3 percent and 19.0 percent; and over 15 years, 48.6 percent and 48.4 percent.

The substantial similarities between the percentages of the two groups indicated that the total sample was representative of the final respondent group to a very high degree. This justified using the final sample alone in the analysis of data.

Results of the Tests of the Five Primary Hypotheses

The implied null hypotheses of research Hypotheses 1, 2 and 3 were all rejected. Hypotheses 1 and 2 tested the relationships between faculty job satisfaction and the variables of leadership behavior and values by means of discrepancy scores. The test of Hypothesis 1 showed that a lesser degree of discrepancy between the perceived ideal and real leadership behavior of the chairperson correlated significantly with faculty job satisfaction. This indicated that, overall, the faculty members approved, to a significant degree, of the
leadership performance of their chairpersons. Since the departments are relatively autonomous of the central administration, this finding points to the fact that the faculty can derive job satisfaction with respect to their chairperson's administrative performance.

The test of the null of research Hypothesis 2 showed that a lesser degree of discrepancy between the values of the chairperson and the faculty correlated significantly with faculty job satisfaction. This could be interpreted to mean that the faculty do perceive the chairpersons as having personal and work values that are, to a considerable degree, congruent with theirs. Such congruency is positively related to their job satisfaction. This could be interpreted to mean that the faculty is sensitive, to a considerable degree, to the value systems of the chairpersons. The chairpersons need to be aware of the fact that large discrepancies between value systems can be a source of conflict in departmental management.

The test of the null of research Hypothesis 3 was rejected. This showed that a lesser discrepancy between chairperson and faculty values correlate, to a significant degree, with a lesser discrepancy between the ideal and real behavior of the chairperson. This finding points to the fact that there is a positive
relationship between values and leadership behavior in the university setting. Changes in leadership behavior can affect changes in value system. The finding could be interpreted to mean that the chairpersons are concerned about the effect of their behavior on the values of the faculty members.

There was consideration of the contention of Wall and Payne (1973) that deficiency or discrepancy scores do not accurately and meaningfully describe the relationship between job satisfaction and the other variables. They suggested that more direct measures such as Pearson or partial correlation were more accurate. To test their contention H4 and H5 were also tested. H4 tested the relationship between real chairperson's behavior and faculty job satisfaction and H5 tested the relationship between real chairperson's values and faculty job satisfaction. The nulls of both research hypotheses were rejected.

Although the nulls of all the five research hypotheses were rejected, it was discovered that, in the case of the discrepancy method, only one of the components of the discrepancy scores contributed to the significant relationship with the job satisfaction variable. Analysis of the partial scores enabled this researcher to prove this point. Partial correlation was
used to directly test the relationship between job satisfaction and real chairperson's behavior while controlling for the effect of the ideal behavior of the chairperson. The result showed that the coefficient obtained from correlating ideal chairperson behavior and job satisfaction was close to zero (.0015); but that obtained from correlating real chairperson's behavior and job satisfaction while controlling for ideal behavior was considerably significant (.5685). This showed that the role of the ideal behavior component of the discrepancy score in H1 was negligible. So it was the real behavior component that determined job satisfaction. Pearson correlation coefficients further confirmed this finding. They showed that the real chairperson behavior correlated significantly with job satisfaction (.5770) while ideal chairperson's behavior correlated insignificantly with job satisfaction (.1200). This finding confirmed the contention of Wall and Payne.

Similar results were found in the case of H5. The partial correlation between chairperson's values and faculty job satisfaction while controlling for the effect of faculty values was significant (.4872). But the partial correlation between faculty values and faculty job satisfaction while controlling for
chairperson's values was very low (.0563). This showed that the contribution of faculty values to the relationship between the discrepancy score and job satisfaction was negligible. The real chairperson's values accounted for the significant relationship. This finding was in agreement with Wall and Payne's contention that only one component of the discrepancy score contributes to the relationship between the independent and dependent variables.

The acceptance of H4 and H5 is indicative of good faculty-chairperson relationships. In regard to leadership behavior, the rejection of the null of H4 could be interpreted to mean that, overall, the faculty had a favorable perception of the leadership behavior of their chairperson. This could be due to the fact that the individual inter-item correlation coefficients were in general, higher with respect to questionnaire items that praised or commended the chairperson's behavior and lower with respect to items that were critical or negative of the chairperson's behavior. For example, the coefficients for the inter-item correlation between the individual 14 job satisfaction items and the following critical leadership behavior item, "The chairperson rules with an iron hand," were very low. Except in the case of one item, all the correlation coefficients
ranged from -.057 to .279. But the coefficients for the inter-item correlation between the individual job satisfaction items and the commendable leadership behavior item, "The chairperson stresses the importance of high morale with the faculty" were higher. They ranged between .230 and .526. Most of the coefficients were moderately high. There was observed a consistent pattern of lower coefficients with respect to critical items and a consistent pattern of higher coefficients with respect to commendable items.

In regard to the role of the chairperson's values in departmental administration, the rejection of the null of H5 could be interpreted to mean that, overall, the faculty members favourably perceived the chairperson's values with respect to their job satisfaction. One interpretation of this could be that the individual inter-item correlation coefficients were in general higher with respect to questionnaire items that commended the chairperson's value system and lower with respect to items that were critical of the chairperson's value system. For example, the coefficients for the inter-item correlation between the individual 14 job satisfaction questionnaire items and the following critical or negative item of the real chairperson's value, "Being unable to empathize with other people," were very
low. The coefficients ranged from -.026 to .217. On the other hand, the coefficients for the inter-item correlation between the 14 individual satisfaction items and the following commendable item of the real chairperson's value "Having a strong intellectual curiosity," was higher. The coefficients ranged from .129 to .480.

The overall favourable perceptions of the chairperson's performance does not mean that all the faculty members were equally satisfied with their job. There were some groups among the faculty that were dissatisfied with certain aspects of the chairperson's leadership behavior and value system. An attempt was made to find out these groups by subjecting the data to a series of analysis of variance tests. There was a total of 15 tests. Each of the five demographic variables—sex, rank, age, degree and length of service—was tested with respect to the three research variables of real chairperson's leadership behavior, real chairperson's values and faculty job satisfaction. Each of the 15 tests was to determine whether there was a significant difference between the demographic groups, that is, the groups under each democratic variable. The results of the analysis of variance tests for the research variables of ideal chairperson's leadership behavior and
faculty values were not reported because the analysis of the discrepancy scores showed that their contribution to the determination of job satisfaction was negligible. Thus they were not used in H4 and H5.

Since the five demographic variables had an unequal number of individuals in the different groups, the likelihood of the violation of the homogeneity of variances existed. This violation could yield a biased F statistic. The Bartlett-Box F test was conducted to detect any violations. No violations were observed in the cases of real chairperson's leadership behavior, real chairperson's values and faculty job satisfaction because the probability level obtained for the relationship between the five demographic variables and the three research variables were all above the set .05 significant level.

The groups compared under sex were male and female faculty members. The results of the three analysis of variance tests dealing with the sex of the respondents indicated that male and female faculty members differed significantly in job satisfaction and in their perceptions of the leadership behavior and values of their real chairpersons. Since the average mean scores of the female faculty members (3.337) were lower than those of male faculty members (3.5562), it was concluded that
their perceptions of the chairperson were less favourable. One interpretation given for the significant differences between groups on the three variables was that the leadership performance of the chairpersons unequally met the needs of both sexes and so the two groups were unequally satisfied and differently perceived the values of their chairpersons. There is need for a change in leadership policies toward groups with unfavourable perceptions of chairperson performance. The chairpersons also need to collect more information on faculty members in order to be able to improve relationships with both groups.

The results of the three analysis of variance tests of significance between groups under ranks of faculty members--instructors, assistant professors, associate professors and professors--did not differ with respect to real chairperson's behavior and real chairperson's values. However, with respect to real chairperson's values, the post hoc least-significant difference test showed that there was significant difference between the perceptions of assistant professors and professors. An examination of the average mean scores of the two groups showed that professors (3.4788) scored higher than assistant professors (3.2303). This could be interpreted to mean
that the assistant professors who are generally at the entry level of the profession do not perceive much congruency between their value systems and those of the chairpersons. This might result in their inability to get adjusted to the administrative style of the chairperson. The analysis of variance showed significant difference in the job satisfaction of rank groups. The least-significant difference test showed that the significant differences are between assistant professors and professors and between associate professors and professors. In regard to administrative performance, this could be the cause of considerable concern. The chairperson needs to collect data on his relationships with the different groups and find out how he can best address their needs and reduce tensions.

The results of the analysis of variance tests showed no significant difference in perceptions of the age groups—20 to 29 years; 39 to 39; 40 to 49; 50 to 59 and over 60 years—with respect to real chairperson's behavior, real chairperson's values and faculty job satisfaction. But the post hoc test showed that age groups—39 to 39 and over 60 years—were significantly different with respect to job satisfaction. Examination of the average means showed that faculty over 60 years (3.660) scored higher than faculty between 30 and 39
(3.3972). In regard to leadership performance, the chairperson has to find a way to address the needs of the younger faculty members. The older faculty seemed to have adjusted to the administrative policies of the chairperson and of the university. If the younger faculty members (mostly assistant and associate professors) do not perceive those policies as likely to address their needs, frequent conflicts might arise in the management of departmental affairs.

The analysis of variance tests showed no significant difference between degree groups—Bachelor's, Master's, Doctorates and other qualifications—with respect to real chairperson's behavior, real chairperson's values and faculty job satisfaction. The least-significant test, however, showed that there was significant difference between Master's degree and Doctorate degree holders with respect to real chairperson's values. An examination of the average means showed that the average means of the Master's degree holders (3.6115) was higher than that of the Doctorate degree holders (3.3686). In terms of leadership performance, this could be interpreted to mean that the Master's degree holders try to identify more closely with the chairperson's value systems than Doctorate degree holders. The chairperson needs to find out the reasons for this difference. Probably the
Master's degree holders, since they are still aspiring toward higher degrees, need the identification for more security in the department. But reasons must be found out why Ph.D. holders would not need such an identification.

The analysis of variance tests showed no significant difference between length of service groups—under five years, five to ten years, ten to 15, and over 15 years—with respect to real chairperson's behavior, real chairperson's values and faculty job satisfaction. But the least-significant difference test showed significant difference between faculty members who have served under five years and those who have served over 15 years with respect to real chairperson's values and faculty job satisfaction. An examination of the average mean scores showed that the faculty members who have served over 15 years scored higher than those who have served less than five years on both chairperson's values and job satisfaction scales. Two trends were observed. The first was that faculty job satisfaction increased with longer length of service in the department. Second, faculty perception of the chairperson's values became more favourable the longer they served in the department. These trends have implications for departmental management. If newly
employed faculty members are to develop favourable attitudes toward their jobs, the chairperson has to start addressing their needs from the time they start working for the department. This would enable him to know what to do to avoid future conflicts over administrative styles and policies.

Discussion of Significant Findings

The first significant finding of the study is that the coefficients obtained from correlations between the discrepancy scores and job satisfaction were not accurately and meaningfully descriptive of the level of the job satisfaction of faculty members. The scores of the real chairperson's leadership behavior in Hypothesis 1 and the real chairperson's values in Hypothesis 2 correlated significantly with job satisfaction. However, the role of the chairperson's ideal leadership behavior in H1 and faculty values in H2 were negligible. This finding is in agreement with the finding of Wall and Payne (1973) that discrepancy scores reflect no more than the relationship between the real or existing component of the discrepancy score and the other variable.

The second significant finding was that female faculty members were less satisfied with their job than male faculty members. They also perceived the leadership
behavior and value system of their chairpersons less favourably than their male counterparts. This claim is supported by the findings of Baldridge et al. (1978) in a national study of faculty members in higher education. In their survey of faculty morale in terms of "satisfaction with working conditions" (p. 196), they observed that "there were differences between women and men. "There is a persistent tendency for men to be more satisfied with their working conditions than women--an attitude that corresponds to our earlier argument that men really do have more advantages" (p. 196).

The third significant finding was that the observed correspondence between increase in job satisfaction and consistent increase in age, rank and length of service of faculty members. Table 14 shows a gradual increase in job satisfaction from an average mean score of 3.1190 for instructors to an average mean score of 3.6410 for professors. Table 15 shows that, with the exception of the age group 20 to 29, there was an increase in job satisfaction from an average mean score of 3.3972 for the age group 30-39 to an average mean score of 3.6610 for faculty members over 60 years of age. Table 17 shows a gradual increase in job satisfaction from an average mean score of 3.3029 for faculty members
who have served less than five years to an average mean score of 3.5925 for those who have served over 15 years of age. This shows that as professors grow older, rise in rank and serve longer in the department, they tend to get more satisfied with their job.

One explanation for this trend seems to be based on what Corson (1960) refers to as the character or ecology of the institution. According to him, the physical and social environment of the institution, its history, educational philosophy and programs and its patterns of decision making make it unique in many ways. Corson views these factors as a complex of commitments that the faculty and administrators have come to accept in the course of adaptation to both internal and external pressures. "In each instance they have been adaptations to the ecology in which the institution has found itself. The sum total is what we call institutional character" (Corson, 1960, p. 179).

One uniqueness of the three state universities studied here is found in the tradition of extensive engagement by its faculty in basic and applied research as a way of serving the university, the state and the nation. There are faculty members who leave these institutions for reasons such as discontent with salary, but the many who stay and grow with the institution do
find something very rewarding in the research tradition or in some other character of the institution. They usually adapt themselves to working conditions and get satisfaction from the traditions they perceive as advantageous to their career goals. An examination of the average mean scores of the 14 job satisfaction items on the instrument (Appendix A) shows that there are items with which faculty members were not quite satisfied. One of these was Item 3: "Satisfaction with the budget the university allocates to the department." Their score on this item was low (2.4854). But among the items with which they were very satisfied were those that deal with the nature of their job and their accomplishments. For example, they scored high on Item 1: "Satisfaction with the sort of work I am doing" (4.2299) and on Item 8: "Satisfaction with accomplishment from the work I do" (4.1350). Since one very important aspect of the nature of the job is the big emphasis on research and the reward for distinguished achievement in research is recognition by colleagues in the discipline, the present researcher believes that items such as these were responsible for the correspondence between increase in job satisfaction and increase in age, rank and length of service.
Recommendations for Future Research

The following recommendations are based on the analysis of the results of this study and on comments made by many respondents:

1. An inquiry into the objective facts—salaries, work benefits, working conditions, etc.—behind the lower level of job satisfaction among women faculty members.

2. A comparative study of the leadership behavior of chairpersons and the job satisfaction of faculty members in state and private universities.

3. A comparative study of the job satisfaction of white and minority faculty members in both private and public universities.

4. An expansion of the present study to include the perceptions of the chairpersons of their leadership behavior and their job satisfaction.
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APPENDIX A

SURVEY INSTRUMENT
PART I: QUESTIONNAIRE

INSTRUCTIONS: Each item has two sets of alternatives: for the set on the left please circle the one alternative that best reflects your opinion about the ideal chairperson, and for the one on the right circle the one alternative that best reflects your opinion about your real or actual chairperson. If your academic unit is a School or Division, answer as if it were a Department.

Abbreviation: AL ALWAYS FR FREQUENTLY US USUALLY SE SELDOM NE NEVER

The chairperson tries to keep faculty members in good standing with the central administration ........................................... 1. AL FR US SE NE 1. AL FR US SE NE

The chairperson asks for sacrifices from the faculty for the good of the department .................................................. 2. AL FR US SE NE 2. AL FR US SE NE

The chairperson sees that a faculty member is rewarded for a job well done 3. AL FR US SE NE 3. AL FR US SE NE

The chairperson tries to develop consensus on the department's mission.... 4. AL FR US SE NE 4. AL FR US SE NE

The chairperson rules with an iron hand ................................. 5. AL FR US SE NE 5. AL FR US SE NE

The chairperson waits for faculty members to push new ideas before he does 6. AL FR US SE NE 6. AL FR US SE NE

The chairperson refuses to give in when faculty members disagree with him. 7. AL FR US SE NE 7. AL FR US SE NE

The chairperson initiates actions that are suggested by faculty members... 8. AL FR US SE NE 8. AL FR US SE NE

The chairperson encourages less productive faculty members to greater effort ......................................................... 9. AL FR US SE NE 9. AL FR US SE NE

The chairperson lets faculty members do their work the way they think best ........................................................................ 10. AL FR US SE NE 10. AL FR US SE NE

The chairperson criticizes a specific act rather than a particular individual ........................................................................ 11. AL FR US SE NE 11. AL FR US SE NE

The chairperson criticizes poor work done by a faculty member .......... 12. AL FR US SE NE 12. AL FR US SE NE

The chairperson gets the approval of the faculty on important matters before making decisions ........................................... 13. AL FR US SE NE 13. AL FR US SE NE

The chairperson tries out his new ideas in the department .............. 14. AL FR US SE NE 14. AL FR US SE NE

The chairperson tries to improve working relations with the faculty .... 15. AL FR US SE NE 15. AL FR US SE NE

The chairperson insists that faculty members follow standard procedures in every detail .................................................. 16. AL FR US SE NE 16. AL FR US SE NE

The chairperson stresses the importance of high morale with the faculty.. 17. AL FR US SE NE 17. AL FR US SE NE

The chairperson stresses keeping the department's relative prestige high. 18. AL FR US SE NE 18. AL FR US SE NE
INSTRUCTIONS: For the set of alternatives on the left, please circle the one alternative that best reflects your opinion about the chairperson, and for the set on the right circle the one alternative that best reflects your own beliefs.

Abbreviation: AL ALWAYS FR FREQUENTLY US USUALLY SE SELDOM NE NEVER

The chairperson is friendly and can be easily approached.........................19. AL FR US SE NE 19. AL FR US SE NE
The chairperson tries to link the department with outside organizations.............................................................20. AL FR US SE NE 20. AL FR US SE NE

Having a keen interest in international, national, and local affairs...... 1. AL FR US SE NE 1. AL FR US SE NE
Ignoring the needs of other people............................................................... 2. AL FR US SE NE 2. AL FR US SE NE
Having little interest in arts, theatre, music, and other cultural activities................................................................. 3. AL FR US SE NE 3. AL FR US SE NE
Turning the other cheek, and forgiving others when they harm you........ 4. AL FR US SE NE 4. AL FR US SE NE
Having a strong intellectual curiosity............................................................ 5. AL FR US SE NE 5. AL FR US SE NE
Letting each person go it alone, without offering help.......................... 6. AL FR US SE NE 6. AL FR US SE NE
Knowing only one's specialty................................................................. 7. AL FR US SE NE 7. AL FR US SE NE
Being selfless in all one's actions............................................................ 8. AL FR US SE NE 8. AL FR US SE NE
Being unable to empathize with other people........................................... 10. AL FR US SE NE 10. AL FR US SE NE
Ignoring what goes on in the world around one....................................... 11. AL FR US SE NE 11. AL FR US SE NE
Helping another to achieve his own goals, even if it might interfere with your own.................................................. 12. AL FR US SE NE 12. AL FR US SE NE
Keeping abreast of current events.............................................................. 13. AL FR US SE NE 13. AL FR US SE NE
Hurting other people's feelings................................................................. 14. AL FR US SE NE 14. AL FR US SE NE
Being interested only in one's work.......................................................... 15. AL FR US SE NE 15. AL FR US SE NE
Helping another person feel more secure, even if one doesn't like him/her 16. AL FR US SE NE 16. AL FR US SE NE
Keeping up with world news through regular reading or by watching informative programs........................................ 17. AL FR US SE NE 17. AL FR US SE NE
Refusing to aid people who don't deserve it............................................. 18. AL FR US SE NE 18. AL FR US SE NE
Showing little concern about the world situation... 19. AL FR US SE NE 19. AL FR US SE NE
Being concerned about the happiness of other people... 20. AL FR US SE NE 20. AL FR US SE NE

INSTRUCTIONS: For each of the following items please circle the one alternative that best reflects your attitude toward your job.

Abbreviation: VS VERY SATISFIED  S SATISFIED  MS MODERATELY SATISFIED  D DISSATISFIED  VD VERY DISSATISFIED

Satisfaction with the sort of work I am doing... 1. VS S MS D VD
Satisfaction with how well my department compares reputationally with other departments in this university... 2. VS S MS D VD
Satisfaction with the budget the university allocates to the department... 3. VS S MS D VD
Satisfaction with my pay... 4. VS S MS D VD
Satisfaction with the way teaching assignments are made... 5. VS S MS D VD
Feeling about advising a friend to work for this university... 6. VS S MS D VD
Satisfaction with chances of getting more pay... 7. VS S MS D VD
Satisfaction with accomplishment from the work I do... 8. VS S MS D VD
Satisfaction with how well my department compares with other departments in the same field... 9. VS S MS D VD
Fairness of the department in assigning committee responsibility... 10. VS S MS D VD
Fairness of the department in assigning services to faculty members... 11. VS S MS D VD
Satisfaction with the importance of my job... 12. VS S MS D VD
Fairness of the department in evaluating my performance... 13. VS S MS D VD
Satisfaction with how the department's goals are fulfilled... 14. VS S MS D VD

PART II: PERSONAL AND STATUS INFORMATION

Sex: 1. Male  2. Female

Rank: 1. Instructor
      2. Assistant Professor
      3. Associate Professor
      4. Professor
      5. Adjunct Professor

Age: 1. 20 to 29
     2. 30 to 39
     3. 40 to 49
     4. 50 to 59
     5. Over 60

Degree held: 1. B.A. or B.S.
             2. M.A. or M.S.
             3. Ph.D or Ed.D.
             4. Other

How long have you been teaching at this university?
1. Under 5 years
2. 5 to 10 years
3. 10 to 15 years
4. Over 15 years
APPENDIX B

LETTER ON FIELD TESTING OF THE INSTRUMENT
To: The Academic Faculty of Educational Administration

From: Tibbie Kposowa

I have decided to pilot-test my questionnaire in the Program Area of Educational Administration. Please complete it and give it to one of the secretaries. Also furnish me with information on the three questions below.

Thanks in advance for your cooperation.

1. Which aspects of departmental administration do you see the chair-person controlling? (tenure and promotion; teaching; research; service; grants; committee content and formation; relationships with outside organizations; etc.).

2. Which of the above-mentioned aspects make an impact on you as a faculty member?

3. What important areas of faculty job satisfaction and/or dissatisfaction does the questionnaire fail to deal with?
APPENDIX C

COVER LETTER AND FOLLOW-UP CORRESPONDENCE
January 23, 1984

Dear Faculty Member,

In large state universities where departments enjoy relative autonomy both as governing and academic units, the relationship between the department chairperson and the faculty members is crucial to the overall management of the university. Among the factors that affect faculty-chairperson relationships are the leadership behavior of the chairperson and the values and job satisfaction of the faculty members. The role of these factors in the management of departmental affairs may be assessed in terms of the degree of discrepancy between the faculty members' perceptions of their actual and ideal chairperson. This study is designed to add clarity to this discrepancy and its implication for faculty-chairperson relationships in state universities in Ohio. Knowledge of the areas of large discrepancy can enable department chairpersons to develop appropriate plans for change for the better management of their academic units.

The findings of such a study may serve the mutual benefit of both faculty members and administration. In order that they may share the results, all respondents will be sent a summary of the areas of greatest discrepancy in faculty-chairperson relationships.

The success of this study also serves the interest of the investigator in his attempt to gather data in order to meet the requirements of the PhD degree in Educational Administration.

The questionnaire is short, straightforward, and can be completed in about twenty minutes. All responses will be treated confidentially and no person or institution will be identified in any report growing out of the study. A code number is placed on each copy of the questionnaire only to make possible follow-up reminders, if needed.

I want and need your response. Please help me by completing and returning the questionnaire at your earliest convenience. Your cooperation is deeply appreciated.

Very Sincerely,

Tibbie Kposowa
February 28, 1984

Dear Faculty Member:

This is a follow-up reminder relative to the questionnaire I sent to you about three weeks ago. The study is designed to examine certain factors that affect faculty-chairperson relationships. Among these factors are the leadership behavior of the chairperson and the values and job satisfaction of the faculty members. These factors are assessed in terms of the degree of discrepancy between faculty members' perceptions of their actual and ideal chairperson.

Your response is very valuable to the success of the study. So please help me by returning the completed questionnaire. If you have already responded, disregard this notice.

Sincerely,

T. Kposowa

Tibbie Kposowa
February 28, 1984

Dear Faculty Member:

Thanks very much for returning your questionnaire. I noticed that you overlooked page two. Please help me by completing and returning it at your earliest convenience.

Sincerely,

T. Kposowa

Tibbie Kposowa
March 7, 1984

Dear Faculty Member:

This is the second follow-up reminder relative to the questionnaire I sent to you about five weeks ago. The study concerns factors that affect faculty-chairperson relationships. Among these factors are the leadership behavior of the chairperson, faculty values and faculty job satisfaction. These factors will be assessed in terms of the discrepancies between faculty members' perceptions of their ideal and real chairperson.

Your response is valuable to my study. So please help by returning the completed questionnaire. In the event you have mislaid the questionnaire sent to you earlier, I have enclosed another for your convenience.

If you have already responded, disregard this reminder.

Sincerely,

T. Kposowa

Tibbie Kposowa
Dear Sir/Madam:

I am writing a doctoral dissertation on a topic dealing with faculty members in state universities in Ohio. I need to update the list of the names of faculty members given in the 1983 university bulletin. Please send me the list of all the faculty members on duty in your department this 1983-84 academic year.

The identities of the universities and the subjects that are participating in the study will not be revealed in the completed dissertation and all responses will be treated confidentially.

Thanks in advance for your co-operation.

Sincerely,

Tibbie Kposowa (Mr.)
Dear Sir/Madam:

This is a follow-up reminder relative to the letter I wrote to your secretary requesting the names of faculty members in your department. I need the information for a doctoral dissertation I am writing on a topic dealing with faculty members. Please send me the list of the names of all faculty members on duty this 1983-84 academic year.

The identity of the subjects and the universities participating in the study will not be revealed in the completed dissertation or in any report growing out of the study.

Thanks in advance for your co-operation.

Sincerely,

T. Kposowa
Tibbie Kposowa (Mr.)