# SELECTION OF ACADEMIC DEPARTMENT HEADS 

IN DOCTORATE-GRANTING
UNIVERSITIES

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## CHAPTER I

## INTRODUCTION

In American higher education, the academic department occupies the elemental level of academic and administrative life that lies between individual faculty members and the deans of an institution's schools or colleges. 1 Faculty members of a given academic discipline are typically the members of an academic department, although in some cases, especially in small institutions, two or more disciplines may be combined to form one academic department (e.g., Department of Mathematics and Statistics). The academic department is the basic unit of the administrative structure in the university. 2 It is, however, much more than an administrative convenience. The history of the last hundred years in higher education has been one of expanding decentralization. 3 Schools have been formed, and departments have been created. The growth has come, according to Corson, not as a result of institutional leadership as much as from the need to satisfy the requirements of individual areas of teaching and research, and of growing professional fields. 4 The academic department is home base for faculty members. It also gives its students a locus of identification. As Benezet noted, the pea-green freshman feels better if he can introduce himself in the dorm as a "chem major" even before he has taken his first course. 5

University presidents, vice-presidents, and deans have great influence on academic planning through the decisions they make regarding
departmental programs, but the operating unit for educational leadership remains the department and its leader, the academic department head. 6 The department head serves as a communication channel, transmitting information from administration to faculty and from faculty to administration. He or she transmits the concerns, needs, interpretations of faculty and dean. 7 Several authors have written about the roles and responsibilities of the academic department head. ${ }^{8-15}$ Some of the research studies attempted to delineate factors that affect the department head's job and aimed at making the department head more efficient and more effective (Drucker defined efficiency as "doing things right", and effectiveness as "doing the right things"16). Other research and literature focus on the ambiguity and role conflictl7 associated with the department headship. 18-20 There is also some research that has focused on what the department head actually did. After their study of the departments of mathematics, history, psychology, English, chemistry, management, and electrical engineering, Dressel, Johnson, and Marcus wrote:

Tradition and faculty require the chairman to be a scholar, but the demands placed upon the chairman include many functions: chairmen initiate action on budget formulations; selection, promotion, and retention of academic staff; faculty salaries; sabbatical leaves; interdepartmental relationships; research grants; education development and innovation; university committee membership; discipline representation; professional growth; advice to dean on departmental matters; administration of faculty relationship; new faculty orientation; departmental meetings; adequate non-academic help; student administration; student advising; class scheduling; student personnel records; faculty load; graduate application approval; grading standards and practices; and curriculum changes. 21

Dressel stated that a department is not likely to improve under any kind of chairman but a strong one. What is needed now, he continued, is a study to examine bases of power for chairmen. 22 One way to get a strong department head, and indeed, one index of power for the department head is found in the selection process used to get him or her in
the first place. How does the particular incumbent get into the chair? There also is reason to believe that efficiency and effectiveness could be improved if we looked at the selection process. In 1960, Corson wrote:

The departmental chairman in the typical American University is a (if not the) lay administrative officer. Hence, there is need for much more thoughtful analysis of what he does and what he might do than yet exists. Scholars who will focus their research on the manner of selection of chairmen . . . can make a large contribution. ${ }^{23}$

Agreeing with Corson, Dressel noted that the department head is a key man in the department's success. Although the effect of a poor chairman is less immediately felt in a good department, he continued, it will suffer appreciably from a succession of weak chairmen. ${ }^{24}$ There is reason to believe that efficiency and effectiveness of the department head could be improved if we analyzed and consequently revised the selection process.

All the literature cited up to this point has dealt with individuals already in the department head's chair. None of the literature cited thus far has dealt with the topic of selection. There seems to be very little published on this topic. The author was able to find two unpublished doctoral dissertations that were devoted entirely to the topic of selection. 25-26 These two dissertations, however, dealt with the selection of school principals, not academic department heads. There are a few publications that have mentioned the subject of selection but devoted the bulk of their attention to other matters. 27-29

To summarize, apparently one of the surest methods for improving the quality of a college or university is to improve the quality of its departmental leadership. Apparently a good selection procedure would
be an important first step toward such a goal. Information gathered on methods of selecting department heads could thus prove to be a contribution to the literature of the field.

## Background of the Problem

Hoyt and Spangler applied factor analysis to the ratings of faculty members and department heads at four universities and identified three major areas of responsibility for the department head:

1. Personnel management,
2. Departmental planning and development,
3. Building the department's reputation. ${ }^{30}$

In the same research study the two investigators asked 1,333 faculty members from four universities to judge the administrative effectiveness of their department heads $(\mathrm{n}=103)$ and to describe the department head's behavior via the use of a questionnaire. Applying factor analysis to the responses, they identified four administrative styles:

1. Democratic practice,
2. Structuring,
3. Interpersonal sensitivity,
4. Vigor. ${ }^{31}$

They found that the four measures of administrative style were significantly related to performance (multiple R's varied from 0.58 to 0.81 with an average of 0.729). Structuring and interpersonal sensitivity were the best predictors of performance on personnel management tasks; vigor and democratic practice predicted building the department's reputation. Departmental planning and development were predicted by vigor, structuring, and democratic practice. ${ }^{32}$

## Statement of the Problem

Brann listed four methods by which department heads are commonly selected:

1. They are appointed by the dean or president or someone in the central administration (those who come to their position this way are often - but not always - known as heads rather than chairmen).
2. The chairmen are chosen by the dean in consultation with faculty.
3. They are elected by their fellow faculty members.
4. They serve a rotating chairmanship in which the senior faculty or all tenured faculty of a department take turns holding office for a specified term. ${ }^{33}$

Given that there are at least three methods of selecting department heads, and assuming that a particular type of department head is being sought at any particular time (e.g., a head for an academic department that seriously needs to build its reputation), can a department get the particular type of head it needs regardless of which method of selection it uses? Specifically, what type of department head is each selection method likely to produce?

## Research Questions

Specifically, this study attempted to answer the following research questions in one particular experimental setting:

1. What are dean's perceptions of the Initiating Structure dimension of the leadership behavior of the academic department head?
2. What are department heads' perceptions of the Initiating Structure dimension of the leadership behavior of the academic department head?
3. What are faculty members' perceptions of the Initiating Structure dimension of the leadership behavior of the academic department head?
4. What are deans' perceptions of the Consideration dimension of the leadership behavior of the academic department head?
5. What are department heads' perceptions of the Consideration dimension of the leadership behavior of the academic department head?
6. What are faculty members' perceptions of the Consideration dimension of the leadership behavior of the academic department head?
7. Do deans and department heads differ significantly in their perception with regard to the Initiating Structure dimension of the leadership behavior of department heads? If so, is there still a significant difference after we control for method of selection?
8. Do department heads and faculty members differ significantly in their perceptions with regard to the Initiating Structure dimension of the leadership behavior of department heads? If so, is there still a significant difference after we control for method of selection?
9. Do deans and faculty members differ significantly in their perceptions with regard to the Initiating Structure dimension of the leadership behavior of department heads? If so, is
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12. Do deans and faculty members differ significantly in their perceptions with regard to the Consideration dimension of the leadership behavior of department heads? If so, is there still a significant difference after we control for method of selection?
13. Is there a significant difference between the method of selection and the degree of the department head's loyalty to his or her academic department?
14. Is there a significant difference between the method of selection and the degree of the faculty members' loyalty to their academic department?
15. Is there a significant difference between the method of selection and the degree of the department head's effectiveness as perceived by faculty members? as perceived by deans?
16. Is there a significant difference between the method of
selection and the emotional detachment of the department head as perceived by deans?
17. Is there a significant difference between the method of selection and the emotional detachment of the department head as perceived by faculty members?
18. Is there a significant difference between method of selection and department head's authoritarianism scores?

## Definition of Terms

For the purpose of this study, the following definitions were used:

1. Academic department is the academic and administrative unit that lies between individual faculty members and the deans of an institution's schools or colleges. ${ }^{34}$ Faculty members of a given academic discipline are the members of this unit. The head of such a unit is referred to in this study as the "academic department head".
2. Academic department head - see "academic department".
3. Faculty member is a full-time or part-time member of an academic department who is engaged in instruction, research, and/or service for that academic unit. Also see "academic department" above.
4. Student is a full-time or part-time member of an academic department who is enrolled in a higher education institution in order to follow a particular course of study.
5. College is an administrative division of a university composed of several academic departments (e.g., College of Arts and Sciences).
6. School is used synonymously with college in this study. It is typically applied to a cluster of departments in a professional field (e.g., School of Medicine).
7. Dean is the person designated by the institution as the head of a college or school.
8. Expectation is an evaluative standard applied to an incumbent of a position. ${ }^{35}$ (In such a study, deans, department heads, and faculty members describe the leadership behavior of the academic department head in terms of how they believe he should behave as a leader.)
9. Perception is "an immediate or intuitive cognition or judgment". ${ }^{36}$ In this study, deans, department heads, and faculty members describe the leadership behavior of the academic department head in terms of how he or she actually behaves as a leader.
10. Leadership is the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation.
11. Leadership Behavior of the Academic Department Head is defined in this study in terms of two dimensions: Initiating Structure and Consideration. "Initiating Structure" is the behavior of the academic department head in determining the relationship between himself or herself and group members in attempting to establish well-defined patterns of organization, channels of communication, and methods of procedure. ${ }^{37}$ For a given individual, his or her initiating structure is his or her total score in the "initiating Structure" dimension of the

LBDQ (Leader Behavior Description Questionnaire). "Consideration" is behavior indicating friendship, mutual trust, respect, and warmth in the relationship between the academic department head and his or her group members. ${ }^{38}$ For a given individual, his or her consideration is his or her total score on the "Consideration" dimension of the LBDQ.
12. Leader Effectiveness is the extent to which a leader achieves the output requirements of the position. Szilagyi defined effectiveness as the degree to which the goals of an organization have been met. ${ }^{39}$ Stogdill gave a broader definition of effectiveness. ${ }^{40}$ His definition includes group output, group morale, and satisfaction of group (organizational) members. In this study, we shall use the broader definition. The effectiveness of a group or organization is usually attributed to its leader although he or she may not influence every activity in the group.
13. Power is the ability to get others to do what you want them to do. ${ }^{41}$ Weber defined power as "the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance". 42

## Limitations of the Study

This study involyed a limited sample of selected institutions of higher learning. No claim is made as to the external validity of the results. The results should be viewed as suggestive and not conclusive.
$1_{\text {Dean }}$ E. McHenry et al., Academic Departments (San Francisco: Jossey-Bass, 1977), p. ix.
${ }^{2}$ John J. Corson, The Governance of Colleges and Universities (New York: McGraw-Hill, 1960), p. 15.
$3^{3}$ Ibid., p. 85.
${ }^{4}$ Ib id.
${ }^{5}$ Louis T. Benezet quoted in McHenry et al., p. 48.
6Frank B. Dilley, "The Department Chairman as Academic Planner," in James Brann and Thomas Emmet, eds., The Academic Department or Division Chairman: A Complex Role (Detroit: Balamp, 1972), p. 29.
${ }^{7}$ David Underwood, "The Chairman as Academic Planner," in James Brann and Thomas Emmet, eds., The Academic Department or Division Chairman: A Complex Role (Detroit: Balamp, 1972), p. 154.
${ }^{8}$ Corson, p. 88.
${ }^{9}$ David W. Leslie, "The Status of the Department Chairmanship in University Organization," AAUP Bulletin, Vol. LIX (December, 1973), pp. 419-426.

10Robert K. Murray, "On Departmental Development: A Theory," The Journal of General Education, Vol. XVI (October, 1964), pp. 227-236.

11 Winston W. Hill and Wendell E. French, "Perceptions of the Power of Department Chairmen by Professors," in J. Victor Baldridge, ed., Academic Governance (Berkeley: McCutchan, 1972), pp. 208-231.

12Robert A. Scott, "The Department Chairperson: Role, Function, and Future," (paper presented at the National League for Nursing Conference, New York, November 20, 1980), Microfiche, ED 196352.

13James H.L. Roach, "The Academic Department Chairperson: Functions and Responsibilities," Educational Record, Vol. LVII (Winter, 1976), pp. 13-23.

14J. Douglas Brown, "Department and University Leadership," in Dean E. McHenry et al., Academic Departments (San Francisco: Jossey-Bass, 1977), pp. 192-193.

15Jacob D. Zucker, "The Department Head: A Study of an Authoritarian Leadership Model in American Higher Education" (a paper presented at the annual meeting of the Association for the Study of Higher Education, March 19, 1978, Chicago, Illinois), pp. 1-20.

16Peter Drucker quoted in Andrew D. Szilagyi, Management and Performance (Santa Monica: Goodyear Publishing Co., 1981), p. 37.

17J.W. Getzels and E.G. Guba, "Social Behavior and the Administrative Process," School Review, Vol. 65 (Winter, 1957), pp. 423-441.

18Zucker, p. 20.
19James Brann and Thomas Emmet, eds., The Academic Department or Division Chairman: A Complex Role (Detroit: Balamp, 1972), pp. 5-27.
${ }^{20}$ Leslie, p. 421.
21 paul L. Dressel, F. Craig Johnson, and Philip M. Marcus, The Confidence Crisis: An Analysis of University Departments (San Francisco: Jossey-Bass, 1971), p. 13.
${ }^{22}$ Dressel, Johnson, and Marcus, p. 247.
${ }^{23}$ Corson, p. 94.
${ }^{24}$ Dressel, Johnson, and Marcus, p. 27.
25Milton Harry Dennison, "The Selection of a School Principal: A Competency Based Approach," Dissertation Abstracts International, Vol. 42, No. 4A (October, 1981), p. 1395.

26Jacalyn Renee Osborne, "A Description of Principalship Selection Processes in Selected Ohio Appalachian School Districts," Dissertation Abstracts International, Vol. 42, No. 6A (December, 1981), p. 2416.

27Elwood B. Ehrle, "Selection and Evaluation of Department Chairmen," Educational Record, Vol. LVI (Winter, 1975), pp. 29-38.
${ }^{28}$ Calvin B.T. Lee, "Relationship of the Department Chairman to the Academic Dean," in James Brann and Thomas Emmet, eds., The Academic Department or Division Chairman: A Complex Role (Detroit: Balamp, 1972), p. 55.

29Zucker, pp. 13-14.
30Donald P. Hoyt and Ronald K. Spangler, "Administrative Effectiveness of the Academic Department Head: I. The Measurement of Effectiveness" (Kansas State University Research Report No. 42, July, 1977), Microfiche, ED 171 214, p. 3.
$3^{31}$ Donald P. Hoyt and Ronald K. Spangler, "Administrative Effectiveness of the Academic Department Head: II. Correlates of Effectiveness" (Kansas State University Research Report No. 42, June, 1978), Microfiche, ED 171 215, p. 3.

32 Ib id.
33 Brann and Emmet, pp. 18-19.
34McHenry et al., p. ix.
${ }^{35}$ Neal Gross, Ward S. Mason, and Alexander W. McGachem, Exploration in Role Analysis: Studies of the School Superintendency Role (New York: Wiley, 1957), p. 58.

36Maurice G. Verbeke, "The Junior College Academic Dean's Leadership Behavior as Viewed by Superiors and Faculty" (unpub. Ed.D. dissertation, Pennsylvania State University, 1966), p. 16.

37Monsour Toulyati, "The Leadership Behavior of the Academic Department Chairman: Expectations and Perceptions of Deans, Chairmen, Faculty Members, and Students at Selected Institutions of Higher Learning" (unpub. Ed.D. dissertation, Oklahoma State University, 1981), p. 7.

38 Ibid.
${ }^{39}$ Andrew D. Szilagyi, Management and Performance (Santa Monica: Goodyear Publishing Company, 1981), p. 38.

40Ralph M. Stogdill quoted in Wayne K. Hoy and Cecil G. Miskel, Educational Administration: Theory, Research, and Practice (New York: Random House, 1978), p. 193.

41Wayne K. Hoy and Cecil G. Miskel, Educational Administration: Theory, Research, and Practice (New York: Random House, 1978), p. 48.

42Max Weber and Talcott Parsons, eds., The Theory of Social and Economic Organization, trs., A.M. Henderson and Talcott Parsons (New York: Free Press, 1947), p. 152.

## CHAPTER II

## REVIEW OF THE LITERATURE

The review of the literature was divided into the following six sections: historical overview, the academic department, leadership theories, the department head, selection of the department head, and an identification of instruments used in studies of the department head.

## Historical Overview

The academic department has gone through several evolutionary stages in its early development. The department of the 18th century American college did not have the structure and power of the 20th century American research university. In interpreting the word "department" in the literature, one needs to take into account the time frame being considered. The academic department of the 18th century American college was a somewhat informal collection of two or more professors teaching the same subjects at the same college. 1 Andersen quoted Quincy's History of Harvard University which referred to a department at Harvard College in 1739:
'The zeal and anxiety of the Board of Overseers at this period extended not only to the religious principles held by the Professors and Tutors at the time of election, but also to the spirit and mode in which they afterwards conducted their respective departments.'2

One teaching arrangement was for a single professor to teach a group of students the whole curriculum from the first year until their graduation
date. Another arrangement was for a single professor to teach a single subject to all students. Departmentalization became necessary in these early years when it proved impossible for one tutor to teach a single class in all subjects. ${ }^{3}$ Even after assigning a particular subject to a single tutor, the increase in enrollment brought together several professors who were engaged in teaching within a particular discipline. By 1767 Harvard had four departments: Latin, Greek, logic and metaphysics, and mathematics and natural philosophy. 4 Ticknor took up the professorship of French and Spanish at Harvard in 1819. He proposed that Harvard be reorganized by departments, with underlying desire to section students according to ability and to offer elective courses. Ticknor's efforts, coupled with a dramatic impact of student rebellion in 1823, resulted in Harvard being reorganized into departments. Ticknor was trying to make a German university out of Harvard College, but he was ahead of his time; Harvard was not ready to undertake the great changes. Upon its opening in 1825, Jefferson's University of Virginia was organized into six schools (ancient languages, modern languages, mathematics, natural philosophy, natural history, moral philosophy, as well as anatomy, medicine, and law) headed by professors. These schools were essentially the equivalent of departments. In a paper that he read to the Vermont faculty soon after he became president in 1826, Marsh proposed that the studies of the college be divided into four departments and that students not seeking degrees be permitted to pursue the studies of a single department if they desired. 5

The Yale Report of 1828 curbed for awhile the growth and development of the academic department in the sense that it curbed the
proliferation of subjects taught in the college. 6 The Morrill Acts, passed by Congress in 1862 and 1890, helped break down the chains that tied colleges to the classical curriculum. It was a move that ran counter to the Yale Report. The purpose of the Morrill Acts was to promote the liberal and practical education of the industrial classes, without neglecting the traditional classical curriculum.

Eliot, a believer in the then developing psychology of individual differences, 7 instituted the elective system at Harvard College in 1869. According to the elective system, a student could choose the subjects he or she wished to pursue. Not only did the elective system encourage diversity among subjects studied, it also encouraged diversity among subjects developed, which in turn helped encourage the proliferation of academic departments. In 1893 the department of biology at the University of Chicago splintered into five new departments: zoology, botany, anatomy, neurology, and physiology. 8 Rudolph noted that scholarship could be served best in such a fashion and the growth of knowledge assured in no other way.

## The Academic Department

Rudolph said that splintering of the biology department at Chicago facilitated the growth of knowledge. There has been criticism levied against the academic department, most of it directed at the department's handling of undergraduate education. Some writers have justified their criticism by arguing that more can be learned about the department by examining its weaknesses. 9 The academic department limited the growth of new fields, the critics said, and acted to preserve the status quo. 10 Departments have championed specialization at the expense of
generalization, broad learning, and interdisciplinary and multidisciplinary studies. Academic departments, with their links to discipline, have been noticeably cool toward public service, problem solving, extension, adult education, and action programs. Departments have contributed to the over-emphasis on research in many prestigious universities and to the teaching crisis in higher education. 11 Cartter said that the one obstacle to the improvement of undergraduate education which was almost impossible to overcome was the academic department. The academic department was a useful device for specialized graduate education, Cartter said, but at the undergraduate level it was frequently an intellectual encumbrance. 12 One vice-chancellor of a large university in England characterized the departments as empires ruled by the chairman or professor, with these chairmen collectively dominating university decisions and effectively protecting their own interests by thwarting innovation. 13 In their conclusion following their study of university departments, Dressel, Johnson, and Marcus wrote:

For some view points, the university has been an outstanding success. It has accommodated a vastly increasing enrollment and offered an amazingly varied range of programs. It has made major contributions to knowledge and to technology. The discipline-based department has been the key unit in these developments. However, in its success, the department or dominant personalities in it have become arrogant and lost the vision of service, which must be a central characterstic of any profession. 14

The academic department had its supporters also. Colleges and universities, like all other organizations, could not exist without some subdivision or unit. 15 Departments, the proponents said, have provided the milieu most suitable for the development, preservation, and transmission of knowledge. 16 Departments promoted scholarship, protected higher learning from stagnation and interference, and provided a sound basis
for hiring and advancing faculty. 17 Dressel wrote the following observation about academic departments:

No structure observed has been able to curb or satisfy the faculty's desires for a disciplinary-based structure corresponding to their graduate school preparation and their research interests. 18

Despite AAUP's predilection for separation of rank and tenure, the academic department revealed the individual's tenure status. In many institutions, the person without a department, no matter the source and quality of his or her degrees, was a person without tenure. The department was both a refuge and support of the professor. It provided the professor with working space: an office, an adjacent classroom or seminar, and (for the scientist) a well-equipped laboratory. 19 The academic department was also a home base for the student. The pea-green freshman felt better if he could introduce himself in the dorm as a "chem major" even before he had taken his first course. 20

In their study of academic departments, Dressel, Johnson, and Marcus found that there were many factors that affected and modified the departmental organization: the size of the institution, the number of departments, the size of departments, balance between graduate and undergraduate instruction, and the extent and nature of faculty and student participation in governance. The resources available and the method of allocation used affected both departments and interdepartmental relations. 21 The findings of Dressel and his associates supported Murray's theory of departmental development. After visiting campuses of 22 universities in the United States, Murray theorized that there existed five distinct stages of departmental development, with distinguishable characteristics belonging to each stage. 22 Departments which had already reached a particular stage possessed at one time
or another most of the features of the preceding stage, thus indicating an evolutionary trend which was more than mere coincidence. The first stage was most easily identified by a small staff (less than 15 ), limited course offerings, major emphasis on teaching as contrasted with research, and a departmental head possessing dictatorial power. The smaller the institution and the less prestige of the department, the more arbitrary was the control exercised by the head. In the "stage one" departments there was infrequent consultation between the head and the department members. The head had a direct access to the president's office as well as the dean's office, and these three individuals were oftentimes involved in the recruitment and appointment of new department members. Administrators and faculty members, alike, judged the department almost exclusively on the basis of their opinion of the head. The second developmental stage came with an increase in size of department or institution, or with a slight budding of departmental prestige. The head still retained his or her arbitrary power, but members began to take a more active interest in departmental affairs. The second stage was permeated by increasing dissension, with a major cleavage developing between those who supported the head and those who did not. The head no longer spoke for the whole department. Strife and turmoil many times brought the necessity for acquiring a new head. The acquiring of the new head was itself a cause for increased misunderstanding between the departmental members and central administration. Department members feared that a new head might be an "administration" man while the administration suspected that too much departmental autonomy in helping select a new head would result in poor leadership and independent mediocrity. The third stage of departmental development was really a
reaction to the second stage. It was found mostly in large institutions (10,000 students) of some prestige and among departments of moderate size (15 to 25 members). The hallmark of this stage was rampant democracy. A committee system, at first very simple and then later quite complex, replaced the unilateral decision-making authority, of former heads. Reflecting a deep suspicion of authority, the head's term of office was restricted to short periods (two to three years) with a limit on the number of times an incumbent could succeed himself. Departments in the third stage were generally very cautious and conservative. They found it difficult to maintain their relative influence on campus because they lacked dynamic leadership and were held somewhat in suspicion by central administration. In the fourth stage of development were found departments whose members identified more with their academic discipline than with their department or institution. Research and publication was more important than teaching. The departments were usually divided into old tenure members and young non-tenure members. Only the senior members possessed the right to participate in decision-making or governing process of the department. The head, or chairman, was selected from among the senior members for a term of office which commonly was for five years. The head exercised considerable authority, but he derived it from his peers and used it with their knowledge and consent. Found in the fourth stage were academic departments possessing considerable academic prestige and existing mainly on the larger (15,000 to 25,000 students), better known campuses. These departments were usually quite large ( 25 to 45 faculty members) and extremely diverse offering full undergraduate and graduate programs. The headship, viewed as a burden and a potential drawback to a man's professional career, was
an unwanted position which the best-known members of the departments often refused to take. Stage five departments were found in institutions that were at the pinnacle of the academic ladder. The job of administering such departments became so complicated that many activities, formerly handled by committees or by senior staff members, were surrendered into the keeping of younger men (usually assistant professors), who were hired specifically to function as junior administrators. This afforded the senior members greater concentration on academic pursuits, thereby enabling them to increase their own and the department's prestige through publication and research. Minor bureaucracies got created within the departments. The headship quickly degenerated into a post of organizational skill and coordination; it became less a position of academic leadership than one of maintaining the burgeoning bureaucracy in well-oiled operation. Murray concluded his article with the inference that the sixth stage of departmental development would be the elimination of the department altogether. 23 But Dilley disagrees, pointing out that academic departments are here to stay. The solution to many of our educational problems, said Dilley, depended upon our producing a new sense of overall education mission in our departments. 24

## Leadership Theories

The academic department head was viewed as a leader of his or her department. (When the department headship is a rotating post, the incumbent is more likely to be seen as a servant of the department, taking care of the department's chores and thereby freeing the faculty to do research and teaching.) Szilagyi saw leadership as a process that involves people and goal accomplishment. He stated:
"Leadership is a process involving two or more people in which one attempts to influence the other's behavior toward the accomplishment of some goal or goals." 25 Before we review the literature on the department head, we shall briefly discuss three leadership theories:

1. The Trait Theory,
2. The Situational Theory,
3. The Behavioral Theory.

## The Trait Theory of Leadership

At about the time of World War I, with increased knowledge of testing and new statistical tools, there was a strong impetus to accumulate data and determine what traits were common to leaders. 26 If the traits could be identified, it was reasoned, then leaders could be selected quickly and efficiently, or an educational process could be organized to socialize or train candidates. 27 However, the sorting out of leaders with various leadership traits from those without them has been notoriously ineffective. Mann reviewed 125 leadership studies searching for a relationship between personality and performance in small groups (the academic department can be thought of as a small group). 28 He found that the 125 studies had generated 750 findings about the personality traits of leaders. Many of the traits tentatively isolated as crucial in one study were contradicted in others, that is, in some groups, effective leaders were assertive and aggressive, in others, mild-mannered and diplomatic. 29 Guyer found no statistically significant relationship between traits of discussion leaders, student evaluations of them, or the grades received by students of discussion leaders. 30 The trait theory then gave negligible and confusing results. This led to the suggestion that
leadership may depend not so much on who the leader is but on what the leader does and how well the leader adapts to the varying requirements of the different situations. In the words of Merton,
. . . leadership does not, indeed cannot, result merely from individual traits of leaders; it must also involve attributes of the transaction between those who lead and those who follow. . . Leadership is, then, some sort of social transaction. 31

The trait theory has been mostly abandoned today.

## The Behavioral Theory of Leadership

With the failure of the trait theory, the research moved to an examination of the behavior or styles of the leader. The Behavioral Theory focused on the leadership style of the individual. Two such styles have been identified: Task Orientation (also called job-oriented style or "initiating structure") and Employee Orientation (also called employee-centered style or "consideration"). 32 Task Orientation is the emphasis the leader places on getting the job done by such actions as assigning and organizing the work, making decisions, monitoring and evaluating performance. Employee Orientation is the openness and friendliness exhibited by the leader and the concern shown for the welfare of subordinates. 33 Figure 1 displays these two leadership styles on two mutually perpendicular axes. 34

Hersey and Blanchard added a third dimension--Effectiveness--to the two-dimensional model, 35 in an effort to measure more accurately how well a leader operates within a given situation. 36 The effectiveness dimension cuts across the two-dimensional Task/Employee Orientation (see Figure 2) and builds the concept of a leader's style, integrated with the demands of a specific environment. When the leader's style is appropriate to a given environment measured by results, it is termed


## Figure 1. Two Leadership Styles



Figure 2. Three Dimensional Model of Leadership Styles
effective; when his or her style is inappropriate to a given environment, it is termed ineffective. 37 A question one might ask is, under what conditions will a given style be appropriate? We can dichotomize the two dimensions of Task/Employee orientation, thereby getting four categories of leadership styles (see Figure 3). 38 At one time investigators at Ohio State University and at the University of Michigan believed that the most effective leadership style was one that was high on both Task Orientation and Employee Orientation (quadrant III in Figure 3). 39 It was assumed that leaders using this style would be associated with groups of subordinates who were high performers and had equally high levels of job satisfaction. 40 However, research data obtained from numerous organizations (a petroleum refinery, a business machine manufacturer, an aircraft manufacturer, and military groups) did not support tḥis belief. 41 In a comprehensive review of the literature dealing with Consideration (Employee Orientation) and Initiating Structure (Task Orientation), Kerr et al. noted some ambiguity in the findings. 42 Thus, contrary to what was initially believed (e.g., by the Ohio and Michigan investigators), there was no one best style of leadership that consistently led to high levels of performance. 43 There are too many other variables that should be considered, i.e., there are too many intervening variables in the study of leadership.

Situational Theory of Leadership

The limitations of the trait and behavioral theories of leadership led researchers to refine and refocus their efforts on the study of leadership in organizations. 44 The result was an increased emphasis on the important situational factors that affect the leader's attempts at


Figure 3. Two Leadership Styles Dichotomized to Obtain Four
influence. The situational theory stated that leadership was a function of the situation rather than the person or what he or she did. 45 According to this theory the situation created an environment that produced leadership. For example, Lincoln was an outstanding president, because he was the right person for the job to get Americans through the Civil War. Had it been another time, the theory would predict, Lincoln would not have become a person of such profound influence. Fielder identified three major factors used to classify the favorableness of a leadership situation: position power of the leader, nature of the task, and leader-member relations. 46 Position power referred to the degree to which the position itself enabled the leader to get his or her colleagues to comply with directives. In organizations the power was formal, the authority vested in the leader's office. In the case of the academic department, it was hypothesized that the selection method used for the department headship might constitute a significant power base for the occupant of the position. The findings of Morse and Lorsch seemed to support the contention that "nature of task" was a major factor in determining the favorableness of a leadership situation. 47 These two investigators found that a manufacturing plant at Akron was more highly successful under a high level of bureaucracy, while a scientific research laboratory at Stockton was also highly successful, but under a very low level of bureaucracy. Earlier, two leadership styles were discussed: task-orientation and employee-orientation. The next question investigators asked was: What was the match between leadership style and situation? In other words, which leadership style was most effective in which type of situation. Fiedler attempted to answer this question using data he collected in a wide variety of group situations (more than 800 groups)
over more than 10 years. 48 For each group, effectiveness of group performance was correlated with leader style. Fiedler found that taskoriented leaders were more effective in situations that were highly favorable or in situations that were relatively unfavorable (see Figure 4). Relationship-oriented leaders tended to be more effective in situations that were moderate in terms of favorableness. Hersey and Blanchard also worked on the situational theory of leadership. ${ }^{49}$ Their findings were known as the "life-cycle theory of leadership." According to this theory, as the level of maturity of one's followers increased, appropriate leader behavior not only required less structure (task), but also less social-emotional support (relationship). The cycle could be illustrated in four quadrants of a leadership effectiveness model (see Figure 5). In quadrant $I$, people set high but obtainable goals and have a desire for task-relevant feedback (how well am I doing?). In quadrant II, people are willing to take responsibility, which involves motivation and competence. In quadrant III, the people have job maturity (ability and technical knowledge to do the task) and psychological maturity (a feeling of self-confidence and self-respect as an individual). In quadrant IV, the people need less supervision and fewer pats on the shoulder. To determine what leadership style was appropriate in a given situation, this theory said, a leader would first determine the maturity level of the individual or group in relation to a specific task that the leader was attempting to accomplish. Using the four maturity levels as a basis for diagnosis, a leader could determine which style was most appropriate. For example, if the followers were of low maturity, the leadership style of quadrant I would be most effective (i.e., high emphasis on task with a low emphasis on relationships).


Figure 4. Correlation Between Leadership Style and Effectiveness


Figure 5. Life-cycle Theory of Leadership

How are the leadership theories reflected in the study of department heads? Various studies have been conducted on the academic department head, some of them exploratory and others more sophisticated, using such techniques as factor analyses and partial correlations. 50-51 According to the American Council on Education there were nearly 80,000 department heads in American higher education. 52 Another estimate was that one of every three faculty members served in the post of department head at one time or another. 53 Heimler estimated that 80 percent of all administrative decisions took place at the departmental level rather than at the higher levels of responsibility and policy formulation. 54

Schroeder used the LBDQ (Leadership Behavior Description Questionnaire) to study the leadership behavior of academic department heads. 55 The study involved 118 department heads, 52 deans, and 161 faculty members in 17 state institutions of higher education. Schroeder found that the department heads scored themselves significantly higher on both Consideration and Initiating Structure dimensions of leadership behavior than did their faculty members. He also found that faculty members expected significantly more Consideration from the ideal head than deans expected. Conversely, deans expected more Initiating Structure from the ideal chairman than did the faculty. Furthermore, he found that the department heads would display significantly more ideal Initiating Structure than the faculty desired, but ideal Consideration was viewed similarly by both groups.

In his doctoral dissertation, Toulyati also used the LBDQ to study faculties' expectations and perceptions of the department head, as well as deans' expectations and perceptions of him or her. 56 Some of

Toulyati's findings were: (a) Deans' expectations on the Initiating Structure dimension (of the LBDQ) were higher than their perceptions on this dimension; i.e., the deans expected the department head to initiate departmental structure much more than the head actually engaged in such activities. (b) Faculty members also expected the department head to initiate structure much more than they actually perceived him doing. For both deans and faculty similar results were obtained on the Consideration dimension. These findings suggested that both deans and faculty expected the department head to lead the department. The department head was expected to be a leader of his or her department.

After studying state-supported four-year colleges, Hill and French found that the role and influence of the position of the department head was directly related to the influence or power of the individual head. 57 (The literature identified at least five different kinds of power: referent power, legitimate power, expert power, reward power, and coercive power. 58) Hall and French's findings supported a previous study by Corson who, after studying a selected group of four-year colleges and universities, concluded that the role of the department head varied among institutions in direct relationship to the personality of the individual department head. 59

Darkenwald found that the headship was a more difficult and stressfilled job at the medium-level institutions, where the laws of decisionmaking authority were less clear than at Stanford and Harvard (where the faculty run the place), or at the smaller schools, where the president and deans were clearly in charge on most issues. 60 At the medium-level institution the department head was more likely to experience conflict with the top administration in reaching decisions that affected his or her department. 61

In 1971, Hill and French conducted a study in which their central concern was to develop an instrument for measuring the power of department heads as viewed by professors, and to determine whether the variations in such perceptions of power were associated with variations in the professional output, perceived productivity, and (job) satisfaction62 of the departmental faculty. 63 The questionnaire developed included 74 items, 30 of which appeared in the article. Some of the conclusions reached by use of this instrument were as follows: (a) Professors consider their department head the first among equals, a person whom they expect will carry their wishes to other administrators. (b) Professors' (job) satisfaction is positively correlated with the power of their department head if he or she uses such power to speak effectively on behalf of the faculty. (c) Department heads' power and faculty members' professional output were negatively correlated. A suggested explanation for this was that the publishing faculty member's "significant others" are members of his or her discipline and not necessarily the department head. 64 (d) In colleges with primary emphasis on teaching, there was a positive correlation between the department head's power and the faculty's perceived productivity.

Todd used the MSDT (Management Style Diagnosis Test) to determine the leadership styles of division/department heads in 12 Oklahoma statesupported two-year colleges. 65 Two of his conclusions were as follows: (a) The number of years an individual spent doing a particular job or set of tasks had little to do with the development of his or her leadership behavior because the head might be primarily involved in routine administrative work. (b) Experiences in educational administration should be supplemented by leadership training experiences and an environment fostering the use of leadership development activities.

The LPC (Least Preferred Co-worker) is a simple questionnaire developed by Fiedler to classify leadership styles. 66 With the use of this questionnaire, the leader is asked to describe the person with whom he or she has worked least effectively on a recent task. The model suggested that a low LPC score--an unfavorable evaluation of the least preferred co-worker--indicated that the leader is ready to reject those with whom he or she has difficulty working. Therefore, the lower the LPC score, the greater the tendency for the leader to be Task Oriented. On the other hand, a high LPC score--a favorable evaluation of the least preferred co-worker--indicated a willingness to perceive even the worst co-worker as having some positive characteristics. Thus, the higher the LPC score, the greater the tendency for the leader to use an Employee Oriented style. 67 A variety of research studies supported these interpretations of LPC scores. 68-70

Selection of the Department Head

In 1969, Darkenwald surveyed 284 colleges and universities to get some insight into the selection methods of department heads. 71 of the 93 universities that were classified as large and research-oriented, only five had their heads selected by dean or president, 48 had their heads elected by the faculty of the department, and 40 were chosen by the dean or president in consultation with the department faculty. 72 of the 92 schools in the middle category, 19 had their department heads selected by the dean or president in consulation with faculty. Of the 81 schools classifed as small, teaching-oriented institutions, 61 had their heads selected by deans, five had their heads elected by department faculty, and 12 had their heads elected by dean or president in consultation
with faculty. In summary, we can say that large, research-oriented universities tended to use method two or three, while small, teachingoriented institutions tended to use method one (see page 5 of this thesis for identification of selection methods).

Osborne looked at principalship selection practices in Ohio Appalachian school districts, with an aim of identifying standards or criteria used in such selection. 73 Some of her findings were:

1. School districts tended to use sporadic, relatively unplanned processes with no written standards or evaluative processes to control the selection.
2. The establishment of formally structured principalship selection processes was not typically a high priority for boards of education and superintendents.
3. Beyond the legal requirements for principalship certification in Ohio, no written criteria for selection were found.
4. Implicit criteria privately held by the superintendents appeared to be very influential in the selection process.
5. Other administrators and faculty in the school district had little, if any, formal voice in suggesting or applying criteria in the selection process.

Dennison also looked at the selection of school principals in California. One of the aims of his study was to see if school administrators had established procedures to ensure that competent individuals were selected for the principalship position. 74 Some of his conclusions were:

1. California educators as a whole appeared to be unfamiliar with the assessment center approach for selecting school principals.
2. Administrators appeared to have more confidence than teachers in the selection procedure they were using. 75

## Instrument Review

This study involved four measuring instruments and three single-item questionnaires. The four instruments were:

1. LBDQ - Real,
2. LBDQ - Modified,
3. Authoritarianism,
4. Faculty loyalty to Department Head.

The three single-item assessments were:
5. Head's loyalty to his or her department,
6. Department head's effectiveness,
7. Emotional detachment.

Appendices $D$ to $G$ consist of these instruments in complete forms; while Appendices A to C identify the questionnaires as they were sent to participants. It should be noted that the four instruments, D to G, are not mutually exclusive; they have several items in common. In Appendices A, $B$, and $C$, however, each item is used only one time.

Leader Behavior Description Questionnaire (LBDQ)

Leadership has been a topic of continuing interest among researchers in the field of administration, and current approaches to the study of leadership emphasize leader behavior and performance rather than traits. One of the most productive research efforts into leader behavior was the Ohio State University leadership studies. A major product of those studies, and probably the most widely employed measure of leader behavior of
school administrators, was the Leader Behavior Description Questionnaire (LBDQ) (see Appendix $D$ for the LBDQ). There were two major advantages to studying leadership through the analysis of behavior of leaders by the use of the LBDQ. First, the research dealt directly with observable phenomena, and one needed not make a priori assumptions about the identity of whatever capacities undergird the phenomena. Second, the emphasis was on description rather than the more difficult task of evaluation of behavior against specified performance criteria. 76 The instrument was composed of 30 short, descriptive statements of the way in which leaders behaved. The form used in this study measured two fundamental dimensions of leader behavior, "Initiating Structure" and "Consideration," identified through factor analysis by Halpin. 77 Each dimension consisted of 15 Likert-type items. Reliability of the LBDQ, using the Spearman-Brown formula, has been consistently high in Halpin's studies yielding split-half coefficients of 0.82 and 0.86 on Initiating Structure and 0.92 and 0.93 on Consideration. 78 The LBDQ was designed in a way that allowed not only the leader but the subordinates and the superordinates to describe the behavior of the leader on expected (Ideal) and perceived (Real) levels. 79 The instructions in Appendices A to $C$ were aimed at getting responses to LBDQ - Real. A slightly different wording of these same instructions (replace "actually engages" to "is expected to engage") yields responses on the LBDQ - Ideal. LBDQ - Modified

McCarthy developed a 40-item questionnaire to describe the administrative behavior of department heads. 80 Thirty of these items were taken from Halpin and Winer's Leadership Behavior Description

Questionnaire (LBDQ). 81 An additional 10 items were formulated on the basis of Hoyt and Rawson's study on why faculty members resigned their positions at a large university. 82 On the basis of analysis completed by McCarthy, Hoyt revised the 40 -item instrument by excluding 10 items from the LBDQ which were generally unrelated to faculty ratings of the department head's effectiveness. The resulting 30-item questionnaire was the i one hereafter called LBDQ - Modified. Hoyt and Spangler administered the LBDQ - Modified to 1,333 faculty members from four universities to judge administrative effectiveness of their department heads $(N=103) .83$ Appendix E consists of LBDQ-Modified, together with the split-half correlations as obtained by Hoyt and Spangler. Applying factor analysis to the 30 items the two investigators obtained the results shown in Appendix F. 84 Four factors were extracted which accounted for 73 percent of the variance in the behavior descriptions. 85 These four factors were called "four administrative styles", and were given the specific names of: Democratic practice, Structuring, Interpersonal Sensitivity, and Vigor. Reliability coefficients on these four administrative styles ranged from 0.86 to 0.96 .

Authoritarianism

Blau and Scott define the authoritarian superior as one who has strong tendencies to supervise closely, to be strict rather than lenient, to have a formal approach to subordinates, and to stick closely to rules and procedures. 86 As conceptualized in the study to be done, authoritarianism is concerned with this kind of behavior in the department head; authoritarianism does not refer to a personality type. To measure the level of authoritarian behavior of a department head as perceived by his or her faculty, eight Likert-type items were included in the
questionnaire in Appendices $A$ to $C$ (but see Appendix $G$ for the eight items that measure authoritarianism). Rees and Hoy used the eight-item instrument to study leadership styles of secondary school principals and found alpha coefficients (measure of internal consistency) of 0.76.87

## Faculty Loyalty to Department Head

The concept of loyalty related both to an immediate superior and to the organization. Thus, loyalty has both a personal and an institutional dimension. It was, however, theoretically possible to be loyal to the school organization without having feelings of loyalty towards the department head. Thus, the personal aspect of loyalty to be used in the study referred to the extent to which faculty were personally committed to the department head. Blau and Scott were among the first researchers to introduce the concept of subordinate loyalty to an immediate superior as an integral aspect of organizational analysis. 88 They define subordinate loyalty as the liking of, acceptance of, respect for, and trust in the superior as expressed by subordinates. In a study of subordinate loyalty in elementary schools, Hoy and Williams found that the more emotionally detached the principal was, the more loyal were his teachers. 89 Measure of loyalty to immediate superior was based on responses to eight Likert-type statements (see Appendix H) originally adapted by Hoy and Williams 90 from a scale developed by Murray and Corenblum ${ }^{91}$ to measure loyalty to one's immediate superior in a bureaucracy. Reliability of this instrument has been consistently high with alphas in the 0.90 range. 92

Head's Loyalty to His or Her Department

As mentioned above, loyalty has both a personal and an institutional
dimension. In the institutional dimension, loyalty was the degree of commitment and identification that teachers had with the particular school in which they were staff members. This study looked at the degree of commitment and identification that faculty members had with their respective academic departments. Straver's study of attitudes towards organizational loyalty revealed that the supervisor plays a most critical part in achieving employee loyalty. 93 A single item used to determine the loyalty of faculty members to their academic department (see Appendix I). This item was included because the literature seemed to indicate that the concepts of subordinate loyalty to immediate superior and loyalty to the organization were important aspects of organizational life.

Department Head's Effectiveness

A single item was used to determine the faculty's perception of the effectiveness of the department head (number 56 in Appendix A). Perceived effectiveness was measured by high scores; i.e., the more effective the department head is as perceived by his or her faculty, the higher the scores was on this item.

## Emotional Detachment

Emotional detachment was defined as a superior's ability to remain calm in response to difficult and trying situations. In his study of factors affecting an individual's loyalty to an organization, Hebert found that emotional level related highly to loyalty. 94 In this study, an index of the department head's emotional detachment was obtained from the faculty's responses to a single Likert-type item, as used by

Blau and Scott in their study of social welfare agencies. 95 High emotional detachment was reflected in high scores (see number 46 in Appendices A to C; also see Appendix K).

## Summary

The academic department has gone through evolutionary stages in its development, beginning with an informal collection of two or more professors teaching the same subject at the same college in the 18th century. Graduate education has had a profound influence on the development of the academic department, and some writers even state that academic departments came about as a direct result of graduate education.

Functions of the academic department include the selection and promotion of faculty, graduate student recruitment and retention, curriculum revision and update, provision of non-academic support, especially secretarial help for faculty.

The academic department head has been viewed as a leader of his or her academic department. A review of the literature reveals three leadership theories:

1. The Trait Theory,
2. The Behavioral Theory,
3. The Situational Theory.

The trait theory of leadership (which postulated that there are traits or human qualities common to all leaders) has been abandoned. The behavioral theory focused on the leadership style of the individual. Two such styles were identified: task-orientation and employeeorientation. The situational theory stated that leadership was a function of the situation rather than the person or what he or she did.

According to this theory, the type of leader needed depended upon the job to be done during any specific period of time.

Brann listed four methods by which department heads were commonly chosen:

1. The department head was appointed by the dean or president or someone in the central administration.
2. The dean chose the head in consultation with the faculty in the department.
3. The department head was elected by his or her fellow faculty members.
4. The headship was a rotating position which senior or tenured faculty of a department took turns holding for a specified term. 33

Darkenwald involved 284 colleges and universities in a study on the selection of department heads. 60 He found that large, research-oriented universities tended to use method two or three, while small teachingoriented institutions tended to use method one. Many studies of the department head may be found in the literature describing the incumbent, but there are few studies that focus on the selection of the department head. This study attempted to help fill that gap. Good selection methods might serve to improve the quality of academic department heads in doctorate-granting universities.

## ENDNOTES

$1_{\text {Kay J. Andersen, "In Defense of Departments," in Dean E. McHenry }}$ et al., Academic Departments (San Francisco: Jossey-Bass, 1977), p. 3.

2Josiah Quincy, The History of Harvard University, quoted in Kay J. Andersen, "The AmbivaTent Department," Educational Record (Spring, 1968), pp. 206-213.
${ }^{3}$ Andersen, "In Defense of Departments," p. 3.
${ }^{4}$ Dean E. McHenry et al., Academic Departments (San Francisco: Jossey-Bass, 1977), p. 3. In today's language we may say that Harvard College was teaching these four subjects, rather than Harvard having four departments.
${ }^{5}$ Frederick Rudolph, The American College and University: A History (New York: Vintage Books, 1962), p. 121.

6The Yale Report was supervised by Jeremiah Day, president of Yale College in 1828. The report was based on the faculty psychology of learning. This ancient psychology of learning saw the human mind as a receptacle and as a muscle with various potentialities waiting to be trained. It was said that only the classical curriculum (of Latin; Greek; logic; rhetoric, natural, moral, and mental philosophy) could fully train the human mind. The Yale Report stated that Yale College would teach the whole classical curriculum, and only the classical curriculum. Such a statement was made to wade off a slow but steady proliferation of new subjects (especially in the sciences) that was taking place at the time. Rudolph, pp. 131-134.
${ }^{7}$ The psychology of individual differences said that no two individuals are alike. Each person has his or her own potentials and capabilities. Thus, no single curriculum could serve all students, neither did it make sense to put all students through the same curriculum (as declared in the Yale Report). The elective system was based on this psychology of individual differences. Rudolph, p. 193.
$8_{\text {Ibid. }}$
$9^{\text {Mchenry et al., p. ix. }}$
${ }^{10}$ Some of these writers are: Paul Dressel et al., The Confidence Crisis: An Analysis of University Departments (San Francisco: JosseyBass, 1971), p. 8; John J. Corson, Governance of Colleges and Universities (New York: McGraw-Hill, 1975); D. Riesman, Constraints and Variety in American Education (New York: Doubleday Anchor Books, 1958), pp. 107-108; Fred Harvey Harrington, "Shortcomings of Conventional Departments" in Dean E. McHenry et al., Academic Departments (San Francisco: Jossey-Bass, 1977), pp. 55-57.

11 Ib id.
12Allan M. Cartter quoted in James Brann and Thomas A. Emmet, eds., The Academic Department or Division Chairman: A Complex Role (Detroit: Balamp, 1972), p. 36.
${ }^{13}$ Paul L. Dressel and W. H. Faricy, Return to Responsibility: Constraints on Autonomy in Higher Education (San Francisco: Jossey-Bass, 1972), p. 59.

14 Dressel et al., p. 233.
15McHenry et al., p. 210.
16Andersen, "In Defense of Departments," p. 8.
17McHenry et al., p. 19.
${ }^{18}$ Dressel and Faricy, p. 37.
19 Dressel, Johnson, and Marcus, p. 6.
${ }^{20}$ Louis T. Benezet, "Uses and Abuses of Departments," in Dean E. McHenry et al., Academic Departments (San Francisco: Jossey-Bass, 1977), p. 48.
${ }^{21}$ Ibid., p. 7.
22Robert K. Murray, "On Departmental Development: A Theory", Journal of General Education, Vol. XVI (October 1964), pp. 227-236.

23Murray, p. 236.
${ }^{24}$ Frank B. Dilley, "The Department Chairman as Academic Planner", in James Brann and Thomas Emmet, eds., The Academic Department or Division Chairman: A Complex Role (Detroit: Balamp, 1972), P. 36.
${ }^{25}$ Andrew D. Szilagyi, Management and Performance (Santa Monica: Goodyear Publishing Company, 1981), p. 442.
${ }^{26}$ Rodney W. Napier and Matti K. Gershenfeld, Groups: Theory and Experience, 2nd ed. (Boston: Houghton Mifflin Company, 1981), p. 238.

27 Ibid.

28R. D. Mann quoted in Napier and Gershenfeld, p. 239.
${ }^{29}$ R. D. Mann quoted in Wayne K. Hoy and Cecil G. Miskel, Educational Administration: Theory, Research, and Practice (New York: Random House, 1978), p. 177.
$30_{B}$. P. Guyer quoted in Napier and Gershenfeld, p. 305.
$31_{\text {Robert }}$ K. Merton quoted in Hoy and Miskel, p. 178.
32Szilagyi, p. 450.
33 Ib id.
${ }^{34}$ Robert Patton Todd, "Leadership Styles and Characteristics of Oklahoma State-Supported Two-Year College Division/Department Chairpersons" (unpub. Ed.D. dissertation, Oklahoma State University, 1977), p. 7.

35 Hersey and Blanchard quoted in Napier and Gershenfeld, p. 269.
36 Ib id.
37 Ib id.
38 Ibid., p. 268.
39Szilagyi, p. 451.
40 Ib id.
41 Ib id.
42Kerr et al. quoted in Donald P. Hoyt and Ronald K. Spangler, "Administrative Effectiveness of the Academic Department Head: II. Correlates of Effectiveness" (Kansas State University Research Report No. 47, June, 1978), Microfiche, ED 171 215, p. 5.
${ }^{43}$ Szilagyi, p. 453.
44 Ibid., p. 454.
${ }^{45}$ Napier and Gershenfeld, p. 246.
46 Fred E. Fieldler quoted in Hoy and Miskel, p. 192.
47 John J. Morse and Jay W. Lorsch, "Beyond Theory Y," Harvard Business Review (May-June, 1970), pp. 61-68.

48Fred E. Fiedler quoted in Hoy and Miskel, pp. 193-4.
49p. Hersey and K. H. Blanchard quoted in Napier and Gershenfeld, pp. 270-3.
${ }^{50}$ Charles H. Heimler, "The College Departmental Chairman" in James Brann and Thomas A. Emmet, eds., The Academic Department or Division Chairman: A Complex Role (Detroit: Balamp, 1972), pp. 198-215.
$5^{51}$ Hoyt and Spangler, p. 5.
${ }^{52}$ American Council on Education, President's Letter (Washington, June, 1980), p. 3.

53 Ib id.
${ }^{54}$ Heimler, p. 199.
55 Gl en B. Schroeder quoted in Monsour Toulyati, "The Leadership Behavior of the Academic Department Chairman: Expectations and Perceptions of Deans, Chairmen, Faculty Members, and Students at Selected Institutions of Higher Learning" (unpub. Ed.D. dissertation, Oklahoma State University, 1981), p. 25.

56 Ib id.
57 Todd, pp. 17-18.
58Napier and Gershenfeld, pp. 251-261.
${ }^{59}$ Todd, p. 18.
${ }^{60}$ Gordon G. Darkenwald quoted in James Brann and Thomas A. Emmet, eds., The Academic Department or Division Chairman: A Complex Role (Detroit: Balamp, 1972), p. 19.
$6^{61}$ Hoppock defines job satisfaction as any combination of psychological, physiological, and environmental circumstances that cause a person to say, "I am satisfied with my job". Hoy and Miskel, p. 120.

62Winston W. Hill and Wendell E. French, "Perceptions of the Power of Department Chairman by Professors," in J. Victor Baldridge, ed., Academic Governance (Berkeley: McCutchan, 1971), pp. 208-231.

63 Ib id.
64A "significant other" is a person who has a great influence on how we typically feel about things. We structure our attitudes and behaviors to resemble his or her as much as we can. We try to become that person. When more than one person is in a collection of significant others, we call this a "referent group". Napier and Gershenfeld, pp. 87-93.

65Todd, pp. 107-108.
${ }^{66}$ Hoy and Miskel, p. 191.
67 Szilagyi, p. 456.

68Fred E. Fiedler, A Theory of Leadership Effectiveness (New York: McGraw-Hill, 1967), pp. $\overline{36-50 .}$

69Mathew D. Arnett, "Sex and Least Preferred Co-workers Score Effects in Leadership Behavior," Sex Roles: A Journal of Research, Vol. 6, No. 1 (February, 1980), pp. 139-152.

70 George C. Theodory, "The Effect of the Least Preferred Co-worker Measure on School Outcomes in Lebanon's Educational System," Journal of Psychology, Vol. 108, No. 1 (May, 1981), pp. 3-6.
$71_{\text {Brann }}$ and Emmet, p. 19.
${ }^{72}$ Gordon G. Darkenwald used the Parsons-Platt Scale of Institutional Differentiation (which would place institutions such as Boston University, San Francisco State, and Smith in the middle, and most small liberal arts schools and former teachers' colleges in the third rank).

73Jacalyn Renee Osborne, "A Description of Principalship Selection Processes in Selected Ohio Appalachian School Districts," Dissertation Abstracts International, Vol. 42, No. 6A (December, 1981), p. 2614.

74Milton Harry Dennison, "The Selection of a School Principal: A Competency Based Approach," Dissertation Abstracts International, Vol. 42, No. 4A (October, 1981), p. 1395.
${ }^{75}$ From the dissertation abstract, it appears that the school administrators in California, unlike those in Ohio, had some kind of a criteria for the selection of principals. But, as in the Ohio case, no teachers participated in the selection process. It seems to be a selffulfilling prophecy then that the administrators showed more confidence (than teachers) in the selection procedures they were using.

76 Andrew W. Halpin, Theory and Research in Administration (New York: Macmillan, 1966), p. 86.

77 Ibid., p. 88.
78Ibid. See also Halpin, Leader Behavior of School Superintendents, p. 9.

79Toulyati, p. 19.
80M. T. McCarthy quoted in Hoyt and Spangler, p. 5.
81 Ib id.
82 Ib id.
${ }^{83}$ Ib id., p. 7.
84 Ibid., p. 13.
${ }^{85} \mathrm{Ib}$ id., p. 3.

86peter Blau and Richard Scott, Formal Organizations (San Francisco: Chandler Publishing Co., 1962), p. $14 \overline{8}$.

87 Richard T. Rees and Wayne K. Hoy, "The Principal and Teacher Loyalty," Research Bulletin, New Jersey School Development Council, Rutgers Graduate School of Education, Vol. XVI (Fall, 1971), pp. 4-8.

88Blau and Scott, p. 144.
${ }^{89}$ Wayne K. Hoy and Leonard B. Williams, "Loyalty to Immediate Superior at Alternate Levels in Public Schools," Educational Administration Quarterly, Vol. VII (Spring, 1971), p. 8.
${ }^{90}$ Ibid., pp. 1-11.
91 V. V. Murray and Allan Corenblum, "Loyalty to Immediate Superior at Alternate Hierarchical Levels in a Bureaucracy," The American Journal of Sociology, Vol. LXII (July, 1966), pp. 77-85.

92 Ibid.
93Will E. Straver, "A Study of Attitudes Toward Organizational Loyalty," Dissertation Abstracts International, Vol. 32, No. 10A (April, 1972), p. 5419.

94Forrest T. Hebert, "Factors Affecting Individual Loyalty to an Organization: The Legislative Organization" (unpub. Ph.D. dissertation, The University of Iowa, 1971).

95Blau and Scott, p. 144.

CHAPTER III

METHODOLOGY

This chapter outlines the methods used for data collection and data analysis.

## Data Collection

The Carnegie Council on Policy Studies in Higher Education defined Doctorate-Granting Universities as

Type 1. These institutions awarded 40 or more Ph.D.'s in at least five fields in 1973-1974 (plus M.D.'s if on the same campus) or received at least $\$ 3$ million in total federal support in either 1973-1974 or 1974-75. Type 2. These institutions awarded at least 20 Ph.D.'s in at least three fields. Also included are few doctorate granting institutions that may be expected to increase the number of Ph.D.'s awarded within a few years. (In all cases the term Ph.D. includes the Ed.D. and other doctor's degrees).

The Carnegie Council divided the category of Doctorate-Granting Universities into two sub-categories, Types I and II. The category identified above Doctorate-Granting Universities was Research Universities, ${ }^{2}$ and the one below it was Comprehensive Universities and Colleges. ${ }^{3}$

As part of the study, questionnaires were sent to 300 deans, department heads, and faculty in 16 Doctorate-Granting Universities. The process of "simple random sampling" was used to select the 16 universities within the category of Doctorate-Granting Universities. ${ }^{4}$ Simple random sampling is a method in which the members of the sample are drawn independently with equal probabilities, using a table of random numbers (see

Table I). The Carnegie Commission on Policy Studies in Education (1976) listed 89 institutions under the category of Doctorate-Granting Universities. ${ }^{5}$ Each institution that was found under this classification was assigned a number ranging from 1 to 89 according to the order in which it appeared on the list. A random sample of $n=16$ out of a population of $N=89$ was needed. A five-digit number was drawn from a hat. (Cards having numerals 0 to 9 were placed in a hat and drawn one at a time. The card was placed back into the hat after each drawing. The numeral appearing on the first card drawn was the first digit of the five-digit starting number. And the numeral appearing on the fifth drawing was the last digit of the five-digit starting number.) The starting five-digit number was located in Table I. The starting number came out to be 72492. This number appears in row 95, column 85-89 of Table I. Starting with that number, the author read down the column 85-89 and selected the first 15 two-digit numbers that did not exceed 89. The starting number itself was not included in this count. The first 15 such numbers were 10,59 , $22,34,01,37,67,02,31,39,73,52,09,39,71$. The numbers in Table I were thought of as forming a continuous closed loop. Thus, the last row (page 546) was thought of as being on top of the first row on page 544 (see Table I). If a number appeared more than once, it was ignored on subsequent appearances and the process was continued until 16 different numbers were identified. The study involved the institutions that corresponded to the 16 numbers. Actually, more than 16 numbers were identified to include situations where a selected institution might not be able to participate in the study.

For each institution selected, the following five academic departments were surveyed: mathematics, psychology, chemistry, management (or

TABLE I
A SAMPLE OF 500 RANDOM NUMBERS

|  | 50-54 | 55-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80-84 | 85-89 | 90-94 | 95-99 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50 | 32847 | 31282 | 03345 | 89593 | 69214 | 70381 | 78285 | 20054 | 91018 | 16742 |
| 51 | 16916 | 00041 | 30236 | 55023 | 14253 | 76582 | 12092 | 86533 | 92426 | 37655 |
| 52 | 66176 | 34037 | 21005 | 27137 | 03193 | 48970 | 64625 | 22394 | 39622 | 79085 |
| 53 | 46299 | 13335 | 12180 | 16861 | 38043 | 59292 | 62675 | 63631 | 37020 | 78195 |
| 54 | 22847 | 47839 | 45385 | 23289 | 47526 | 54098 | 45683 | 55849 | 51575 | 64689 |
| 55 | 41851 | 54160 | 92320 | 69936 | 34803 | 92479 | 33399 | 71160 | 64777 | 83378 |
| 56 | 28444 | 59497 | 91586 | 95917 | 68553 | 28639 | 06455 | 34174 | 11130 | 91994 |
| 57 | 47520 | 62378 | 98855 | 83174 | 13088 | 16561 | 68559 | 26679 | 06238 | 51254 |
| 58 | 34978 | 63271 | 13142 | 82681 | 05271 | 08822 | 06490 | 44984 | 49307 | 61717 |
| 59 | 37404 | 80416 | 69035 | 92980 | 49486 | 74378 | 75610 | 74976 | 70056 | 15478 |
| 60 | 32400 | 65482 | 52099 | 53676 | 74648 | 94148 | 65095 | 69597 | 52771 | 71551 |
| 61 | 89262 | 86332 | 51718 | 70663 | 11623 | 29834 | 79820 | 73002 | 84886 | 03591 |
| 62 | 86866 | 09127 | 98021 | 03871 | 27789 | 58444 | 44832 | 36505 | 40672 | 30180 |
| 63 | 90814 | 14833 | 08759 | 74645 | 05046 | 94056 | 99094 | 65091 | 32663 | 73040 |
| 64 | 19192 | 82756 | 20553 | 58446 | 55376 | 88914 | 75096 | 26119 | 83898 | 43816 |
| 65 | 77585 | 52593 | 56612 | 95766 | 10019 | 29531 | 73064 | 20953 | 53523 | 58136 |
| 66 | 23757 | 16364 | 05096 | 03192 | 62386 | 45389 | 85332 | 18877 | 55710 | 96459 |
| 67 | 45989 | 96257 | 23850 | 26216 | 23309 | 21526 | 07425 | 50254 | 19455 | 29315 |
| 68 | 92970 | 94243 | 07316 | 41467 | 64837 | 52406 | 25225 | 51553 | 31220 | 14032 |
| 69 | 74346 | 59596 | 40088 | 98176 | 17896 | 86900 | 20249 | 77753 | 19099 | 48885 |
| 70 | 87646 | 41309 | 27636 | 45153 | 29988 | 94770 | 07255 | 70908 | 05340 | 99751 |
| 71 | 50099 | 71038 | 45146 | 06146 | 55211 | 99429 | 43169 | 66259 | 97786 | 59180 |
| 72 | 10127 | 46900 | 64984 | 75348 | 04115 | 33624 | 68774 | 60013 | 35515 | 62556 |
| 73 | 67995 | 81977 | 18984 | 64091 | 02785 | 27762 | 42529 | 97144 | 80407 | 64524 |
| 74 | 26304 | 80217 | 84934 | 82657 | 69291 | 35397 | 98714 | 35104 | 08187 | 48109 |
| 75 | 81994 | 41070 | 56642 | 64091 | 31229 | 02595 | 13513 | 45148 | 78722 | 30144 |
| 76 | 59537 | 34662 | 79631 | 89403 | 65212 | 09975 | 06118 | 86197 | 58208 | 16162 |
| 77 | 51228 | 10937 | 62396 | 81460 | 47331 | 91403 | 95007 | 06047 | 16846 | 64809 |
| 78 | 31089 | 37995 | 29577 | 07828 | 42272 | 54016 | 21950 | 86192 | 99046 | 84864 |
| 79 | 38207 | 97938 | 93459 | 75174 | 79460 | 55436 | 57206 | 87644 | 21296 | 43393 |
| 80 | 88666 | 31142 | 09474 | 89712 | 63153 | 62333 | 42212 | 06140 | 42594 | 43671 |
| 81 | 53365 | 56134 | 67582 | 92557 | 89520 | 33452 | 05134 | 70628 | 27612 | 33738 |
| 82 | 89807 | 74530 | 38004 | 90102 | 11693 | 90257 | 05500 | 79920 | 62700 | 43325 |
| 83 | 18682 | 81038 | 85662 | 90915 | 91631 | 22223 | 91588 | 80774 | 07716 | 12548 |
| 84 | 63571 | 32579 | 63942 | 25371 | 09234 | 94592 | 98475 | 76884 | 37635 | 33608 |
| 85 | 68927 | 56492 | 67799 | 95398 | 77642 | 54913 | 91583 | 08421 | 81450 | 76229 |
| 86 | 56401 | 63186 | 39389 | 88798 | 31356 | 89235 | 97036 | 32341 | 33292 | 73757 |
| 87 | 24333 | 95603 | 02359 | 72942 | 46287 | 95382 | 08452 | 62862 | 97869 | 71775 |
| 88 | 17025 | 84202 | 95199 | 62272 | 06366 | 16175 | 97577 | 99304 | 41587 | 03686 |
| 89 | 02804 | 08253 | 52133 | 20224 | 68034 | 50865 | 57868 | 22343 | 55111 | 03607 |
| 90 | 08298 | 03879 | 20995 | 19850 | 73090 | 13191 | 18963 | 82244 | 78479 | 99121 |
| 91 | 59883. | 01785 | 82403 | 96062 | 03785 | 03488 | 12970 | 64896 | 38336 | 30030 |
| 92 | 46982 | 06682 | 62864 | 91837 | 74021 | 89094 | 39952 | 64158 | 79614 | 78235 |
| 93 | 31121 | 47266 | 07661 | 02051 | 67599 | 24471 | 69843 | 83696 | 71402 | 76287 |
| 94 | 97867 | 56641 | 63416 | 17577 | 30161 | 87320 | 37752 | 73276 | 48969 | 41915 |
| 95 | 57364 | 86746 | 08415 | 14621 | 49430 | 22311 | 15836 | 72492 | 49372 | 44103 |
| 96 | 09559 | 26263 | 69511 | 28064 | 75999 | 44540 | 13337 | 10918 | 79846 | 54809 |
| 97 | 53873 | 55571 | 00608 | 42661 | 91332 | 63956 | 74087 | 59008 | 47493 | 99581 |
| 98 | 35531 | 19162 | 86406 | 05299 | 77511 | 24311 | 57257 | 22826 | 77555 | 05941 |
| 99 | 28229 | 8862 | 25695 | 94932 | 30721 | 16197 | 78742 | 34974 | 97528 | 45447 |

its equivalent), and electrical engineering. Institutions having less than four of the five academic departments were dropped from the study and replaced by others. In the cover letter, these five academic departments were referred to as the chosen departments. Two faculty members from each chosen department received a 56-item Questionnaire A. Each head of the selected departments was mailed a 47-item Questionnaire B. Each dean who was responsible for any of the selected departments was mailed a 47-item Questionnaire C. (See Appendix C.)

The following procedure was used to select the two faculty members. Each head in a chosen department was asked to identify from an alphabetical departmental faculty list the first and last name and to ask these two people to complete a copy of Questionnaire A. In case of some difficulty, the first name could be replaced with the second, while the last could be replaced by the next to last. Individuals who did not respond within the first three weeks were sent a second letter along with another copy of the appropriate questionnaire ( $\mathrm{A}, \mathrm{B}$, or C ) in order to raise the rate of response. Responses to questionnaires were codified and keypunched onto IBM cards.

## Data Analysis

The data were collected, using the procedures outlined above in order to answer the following research questions:

Research Questions 1-6: These questions were answered by displaying in Table I the respondents' mean score on each item of the dimension. Arithmetic means ${ }^{6}$ (the best single statistical value describing central tendency of a set of scores) and variances ${ }^{7}$ (a statistical measure of variability based on the average squared deviation of the individual
scores from the mean) of the scores on Initiating Structure dimension and Consideration dimension were calculated and noted in the table.

Kerlinger wrote that
To study scientific problems and to answer scientific questions, differences among phenomena must be studied. Without differences, without variation, there is no way to determine the relations among variables . . . . The measure of central tendency used is the mean. The measure of variability used is the variance . . . Solving research problems without these measures is next to impossible. ${ }^{8}$

Research Question 7: ANOVA (analysis of variance) was performed on the mean of the scores of deans and the mean of the scores of department heads on the Initiating Structure dimension of the leadership behavior of department heads to see if there was a significant difference between the two means. 9 Kerlinger noted that

The analysis of variance is not just a statistical method. It is an approach and a way of thinking. From one point of view at least, modern statistical methods culminate in analysis of variance and factor analysis. Both methods are general. Both have aims of scientific data analysis hardly conceived of fifty years ago. 10

Department heads who were selected for the headship by a particular method formed an operational group. Thus, department heads formed four groups corresponding to the four methods of selection. For each such group, two mean scores were computed for the Initiating Structure dimension of the leadership behavior of the department head: one mean score from the deans' responses and the other from the department heads' responses. Then, an ANOVA was performed on the two means for each group to determine whether there was a significant difference between them. Note that the ANOVA was supposed to be performed four times: $\bar{X}_{1}, 1$ with $\bar{X}_{2}, 1, \bar{X}_{1}, 2$ with $\bar{X}_{2,2}, \bar{X}_{1,3}$ with $\bar{X}_{2,3}$, and $\bar{X}_{1,4}$ with $\bar{X}_{2,4}$ (see Endnote 11 on page 58).

Method of Selection

|  | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| Respondents | Deans |  |  |  |
|  | $\bar{x}_{1,1}$ | $\bar{x}_{1,2}$ | $\bar{x}_{1,3}$ | $\bar{x}_{1,4}$ |
| $\bar{x}_{2,1}$ | $\bar{x}_{2,2}$ | $\bar{x}_{2,3}$ | $\bar{x}_{2,4}$ |  |

Figure 6. Mean Scores on the Initiating Structure Dimension for Department Heads and Deans According to Method of Selection of Department Heads

Research Question 8: An ANOVA was performed on the means of the department heads' scores and faculty members' scores on the Initiating Structure dimension of the leadership behavior of department heads, to see if there was significant difference between the two means. The department heads were then divided into four groups, corresponding to the four methods of selection. For each group, the mean score on the Initiating Structure dimension was computed as perceived by faculty, and as perceived by department heads. An ANOVA was performed two times, $\bar{x}_{1,2}$ with $\bar{x}_{2,2}$ and $\bar{x}_{1,3}$ with $\bar{x}_{3,3}$. None of the respondents indicated Method 1 or Method 4. Thus, those four sets turned out to be empty sets.

Research Question 9: An ANOVA was performed on the means of the deans' scores and faculty members' scores on the Initiating Structure dimension of the leadership behavior of department heads, to see whether there was significant difference between the two means. Department heads were divided into four groups, corresponding to the four methods of selection. For each group there was a mean score on Initiating Struc-
ture dimension as perceived by deans, and another mean score on the same dimension as perceived by faculty members. An ANOVA was performed on the two means for each group to determine whether there was significant difference between them.

Research Question 10: An ANOVA was performed on the means of the deans' scores and the department heads' scores on the Consideration dimension of the leadership behavior of the department heads. Then the department heads were divided in four groups corresponding to the four methods of selection. For each group, a mean score was computed on the Consideration dimension as perceived by deans and for the dimension as perceived by department heads. ANOVA was performed on the two means for each group to determine whether there was a significant difference between them.

Research Question 11: An ANOVA was performed on the means of the department heads' scores and the faculty members' scores on the Consideration dimension of the leadership behavior of department heads. Then the department heads were divided into four groups corresponding to the four methods of selection. For each group, a mean score was computed for the Consideration dimension of leadership as perceived by faculty members and for the dimension as perceived by department heads. An ANOVA was performed on the two means for each group to determine whether there was a significant difference between them.

Research Question 12: An ANOVA was performed on the means of deans' scores and faculty members' scores for the Consideration dimension of the leadership behavior of department heads. Department heads were divided into four groups, corresponding to the four methods of selection. For each group there was a mean score on the Consideration
dimension as perceived by deans and another mean score on the same dimension as perceived by faculty members. An ANOVA was performed on the two means for each group to determine whether there was a significant difference between them.

Research Question 13: Department heads were divided into four groups corresponding to the four methods of selection. For each such group, the mean score on loyalty was computed (see Figure 7). Then an ANOVA was performed on $\bar{x}_{2}$ with $\bar{x}_{3}$ to determine whether there was a significant difference between them. ${ }^{11}$

Method of Selection

|  | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| Mean Score | $\overline{\mathrm{X}}_{1}$ | $\bar{x}_{2}$ | $\bar{x}_{3}$ | $\overline{\mathrm{X}}_{4}$ |

Figure 7. Mean Scores on Loyalty for Department Heads According to Their Method of Selection

Research Question 14: For Question 13 above, the department heads were divided into four groups corresponding to the four methods of selection. Similarly, for research question 14, faculty members were divided into four groups, corresponding to the four methods of selection of the department heads. For each group, the mean score was computed on the faculty loyalty to their respective academic departments. Then an ANOVA was performed on $\overline{\mathrm{X}}_{2}$ with $\overline{\mathrm{X}}_{3}$ to determine whether there was significant difference between them.

Research Question 15: Faculty members were divided into four groups, corresponding to the four methods of selection of department heads. For each group, a mean score was computed regarding the heads' effectiveness as perceived by faculty. An ANOVA was then performed on $\bar{x}_{2}$ with $\bar{x}_{3}$ to determine whether there was a significant difference between them.

Research Question 16: The department heads were divided into four groups, corresponding to the four methods of selection. For each group, a mean score was computed for emotional detachment of the department heads as perceived by deans. Then an ANOVA was performed on $\bar{x}_{2}$ with $\bar{x}_{3}$ to determine whether there was significant difference between them.

Research Question 17: The process of analysis was similar to research question 16, but here the mean score was based on the emotional detachment of department heads as perceived by faculty members.

Research Question 18: The department heads were divided into four groups corresponding to the four methods of selection. For each group, a mean score was computed for the heads' authoritarianism. An ANOVA was performed on $\bar{X}_{2}$ with $\bar{X}_{3}$ to determine whether there was significant difference between these two means scores.
${ }^{1}$ Carnegie Council on Policy Studies in Higher Education, A Classification of Institutions of Higher Education (Berkeley: 1976), p. xv.
${ }^{2}$ Ibid. Research Universities category is sub-divided into two parts. Type $1--$ the 50 leading universities in terms of federal financial support of academic science in at least two of the three academic years, 1972-73, 1973-74, and 1974-75, provided they awarded at least 50 Ph.D.'s (plus M.D.'s if a medical school was on the same campus) in 1973-74. Rockefeller University was included because of the high quality of its research and doctoral training, even though it did not meet these criteria. Type 2--These universities were on the list of the 100 leading institutions in terms of federal financial support in at least two out of the above three years and awarded at least 50 Ph.D.'s (plus M.D.'s if a medical school was on the same campus) in 1973-74. At least 25 of these degrees must have been Ph.D.'s. Alternatively, the institution was among the leading 60 institutions in terms of the total number of Ph.D.'s awarded during the years from 1965-66 to 1974-75.
${ }^{3}$ Ibid., p. xvi. The Comprehensive Universities and College category is sub-divided into two types. Type 1--This group includes institutions that offered a liberal arts program as well as several other programs, such as engineering and business administration. Many of them offered master's degrees, but all lacked a doctoral program or had an extremely limited doctoral program. All had at least two professional or occupational programs and enrolled at least 2,000 students in 1976. Type 2--These colleges and universities offer a liberal arts program and at least one professional or occupational program. Enrollments begin at 1,000 to 1,500 . In the past, many of these institutions were teacher colleges.
${ }^{4}$ George W. Snedecor and William G. Cochran, Statistical Methods, 6th ed. (Ames, IA: Iowa State University Press, 1967), pp. 511-512.
${ }^{5}$ Carnegie Council on Policy Studies in Higher Education, A Classification of Institutions of Higher Education, rev. ed. (Berkeley: The Carnegie Council, 1976), pp. 8-12.
${ }^{6}$ Albert E. Bartz, Basic Statistical Concepts in Education and Behavioral Sciences (Minnesota: Burgess Publishing Co., 1976), p. 49.
${ }^{7}$ Ibid., p. 270.
${ }^{8}$ Frederick N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964), p. 93.
${ }^{9}$ Norman H. Nie et al., Statistical Package for the Social Sciences, 2nd ed. (New York: McGraw-Hi11, 1975), p. 9.
${ }^{10}$ Kerlinger, p. 187.
${ }^{11}$ None of the respondents indicated Method 1 or Method 4 for the selection of their department head. Thus, those two sets turned out to be empty. An ANOVA was therefore performed on $\overline{\mathrm{X}}_{1,2}$ with $\overline{\mathrm{X}}_{2,2}$ and $\overline{\mathrm{X}}_{1,3}$ with $\overline{\mathrm{X}}_{2,3}$.

In the course of carrying out his or her roles and responsibilities, the academic department head interacts with faculty members in the department as well as with the dean of the school or college of which the department is a part. It was for this reason that this study on the selection of department heads included faculty members and deans, as well as department heads. There were a total of 210 respondents, which included 92 faculty members, 61 department heads, and 57 deans.

Presentation and Analysis of Data

The data collected were treated using inferential statistics: analyses of variance, between subjects design. A11 t-tests were at the 0.05 level of significance.

Research Questions 1-6: The LBDQ (Leadership Behavior Description Questionnaire that was used for the study consisted of two subscales called dimensions: the Initiating Structure dimension and the Consideration dimension. Each dimension had 15 items, a total of 30 items for the whole instrument (see Appendix D). For each item of the LBDQ three mean scores were computed, one for deans' responses, another for department heads' responses, and a third for faculty members' responses. These responses are displayed in Table II. For each dimension of the LBDQ, three mean scores were computed, one from the deans' responses, a second

TABLE II
RESPONDENTS' MEAN SCORES ON EACH ITEM OF THE LBDQ-REAL

| Initiating Structure Dimension |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 tem |  | $\begin{aligned} & \text { Deans } \\ & \text { (57) } \end{aligned}$ |  | Dept. Heads (61) |  | $\begin{aligned} & \text { Faculty } \\ & (92) \end{aligned}$ |  |
| 1 |  | 3.34 |  | 3.12 |  | 3.08 |  |
| 2 |  | 3.06 |  | 2.77 |  | 3.00 |  |
| 3 |  | 3.31 |  | 3.14 |  | 3.01 |  |
| 4 |  | 2.68 |  | 2.54 |  | 2.29 |  |
| 5 |  | 1.85 |  | 1.35 |  | 1.55 |  |
| 6 |  | 1.20 |  | 0.66 |  | 1.04 |  |
| 7 |  | 2.56 |  | 1.92 |  | 1.98 |  |
| 8 |  | 2.94 |  | 2.57 |  | 2.50 |  |
| 9 |  | 2.88 |  | 2.36 |  | 2.61 |  |
| 10 |  | 2.18 |  | 1.87 |  | 1.82 |  |
| 11 |  | 2.91 |  | 2.61 |  | 2.67 |  |
| 12 |  | 2.59 |  | 2.65 |  | 2.89 |  |
| 13 |  | 3.00 |  | 2.74 |  | 2.66 |  |
| 14 |  | 3.03 |  | 2.62 |  | 2.52 |  |
| 15 |  | 2.85 |  | 2.35 |  | 2.57 |  |
|  | Mean |  | 2.692 |  | 2.321 |  | 2.413 |
|  | Std Dev |  | 0.570 |  | 0.659 |  | 0.584 |
| Consideration Dimension |  |  |  |  |  |  |  |
| 16 |  | 3.40 |  | 3.57 |  | 3.38 |  |
| 17 |  | 3.32 |  | 3.71 |  | 3.50 |  |
| 18 |  | 3.00 |  | 3.34 |  | 2.93 |  |
| 19 |  | 3.06 |  | 2.97 |  | 2.94 |  |
| 20 |  | 2.86 |  | 2.85 |  | 2.46 |  |
| 21 |  | 2.79 |  | 3.10 |  | 2.76 |  |
| 22 |  | 3.33 |  | 3.69 |  | 3.41 |  |
| 23 |  | 3.23 |  | 3.55 |  | 3.16 |  |
| 24 |  | 2.75 |  | 2.92 |  | 2.64 |  |
| 25 |  | 3.27 |  | 3.42 |  | 3.27 |  |
| 26 |  | 3.05 |  | 2.95 |  | 3.02 |  |
| 27 |  | 2.51 |  | 2.78 |  | 2.54 |  |
| 28 |  | 2.54 |  | 2.57 |  | 3.11 |  |
| 29 |  | 3.12 |  | 3.12 |  | 2.64 |  |
| 30 |  | 2.52 |  | 2.68 |  | 2.59 |  |
|  | Mean |  | 2.983 |  | 3.148 |  | 2.963 |
|  | Std Dev |  | 0.307 |  | 0.374 |  | 0.350 |
|  | Grand Mean |  | 2.838 |  | 2.735 |  | 2.688 |
|  | Grand Std Dev |  | 0.473 |  | 0.674 |  | 0.549 |
| Mean $=2.983$ is the mean on the Consideration dimension for all the deans that participated in this study. |  |  |  |  |  |  |  |
| Grand | Mean $=2.838$ is the deans tha | the m parti | in on a | 30 items <br> the study | oth dir | nsions) | r all |

from the heads' responses, and a third for the faculty's responses. Three standard deviations (the positive square-root of the variance) were also computed for each dimension of the LBDQ. All of these data have been tabulated in Table II. The grand mean, the mean for the 30 items, and the grand standard deviation for the 30 items have also been noted. Looking at the three mean scores on the Initiating Structure dimension, one can see that both deans and faculty members perceived department heads as initiating structure much more often than the heads perceived themselves as doing. Looking at the three means for the Consideration dimension, we see that the situation is different. Regarding the Consideration dimension, department heads perceived themselves as being more considerate than the deans and faculty did.

Research Question 7: On the Initiating Structure dimension of the LBDQ, the mean score for deans was $x=2.692$ and that for department heads was $x=2.321$. An ANOVA (more simply, $t$-test) performed on these two mean scores found them to be significantly different at the 0.05 level. Table III was developed from part of the computer printout of the t-test. Since 0.111 is greater than 0.05 (our probability level), the column labeled "Pooled Variance Estimate" is used; otherwise, the column labeled "Separate Variance Estimate" is used. Since 0.018 is less than 0.05 (the selected probability level), the difference between these two mean scores was found to be statistically significant.

| Deans | Heads |
| :---: | :---: |
| $\bar{x}=2.692$ | $x=2.321$ |

Figure 8. Mean Scores for Deans and Department Heads on the Initiating Structure Dimension of the LBDQ

|  |  | ```Pooled Variance Estimate``` |  | Separate Variance Estimate |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\mathrm{F}}{\mathrm{value}}$ | 2-Tail Prob. | $\stackrel{\text { t }}{\text { value }}$ | $\begin{aligned} & \text { 2-Tai } 1 \\ & \text { Prob. } \end{aligned}$ | $\stackrel{t}{\text { value }}$ | $\begin{aligned} & \text { 2-Tail } \\ & \text { Prob. } \end{aligned}$ |
| 4.00 | 0.111 | -2.72 | 0.018 | -2.84 | 0.076 |

Figure 9. T-Tests Results on Deans' and Department Heads' Mean Scores on the Initiating Structure Dimension of the LBDQ

Department heads who participated in this study received their headship via Selection Method 2 or Selection Method 3 (none was selected via Methods 1 or 4). The heads were divided into two groups corresponding to their method of selection. Of the 61 department heads who responded to the questionnaire, 39 were selected by Method 2, while 22 were selected by Method 3 ( $\mathrm{H} 2=39$; H3 = 22). Deans that participated in this study were also divided into two groups corresponding to the method of selection of their department heads. For each of the subgroups (H2, H3, D2, D3, F2, F3) a mean score was computed from the responses to each item in the LBDQ (see Table III). For each subgroup a

## TABLE III

MEAN SCORES OF RESPONDENTS ON EACH ITEM OF THE LBDQ-REAL ACCORDING TO THE METHOD OF SELECTION OF THE DEPARTMENT HEAD

| Initiating Structure Dimension |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item |  | $\begin{gathered} \text { D2 } \\ (44) \end{gathered}$ |  | $\begin{gathered} \text { D3 } \\ (13) \end{gathered}$ |  | $\begin{aligned} & \text { H2 } \\ & \text { (39) } \end{aligned}$ |  | $\begin{gathered} \text { H3 } \\ (22) \end{gathered}$ |  | $\begin{gathered} \text { F2 } \\ (53) \end{gathered}$ |  | $\begin{gathered} \text { F3 } \\ \text { (35) } \end{gathered}$ |  |
| 1 |  | 3.41 |  | 3.07 |  | 3.14 |  | 3.20 |  | 3.32 |  | 2.60 |  |
| 2 |  | 3.09 |  | 2.92 |  | 2.81 |  | 2.95 |  | 3.02 |  | 2.92 |  |
| 3 |  | 3.35 |  | 3.23 |  | 3.16 |  | 3.35 |  | 3.26 |  | 2.63 |  |
| 4 |  | 2.59 |  | 2.93 |  | 2.73 |  | 2.40 |  | 2.57 |  | 1.74 |  |
| 5 |  | 1.77 |  | 2.07 |  | 1.54 |  | 0.95 |  | 1.72 |  | 1.40 |  |
| 6 |  | 0.97 |  | 1.61 |  | 0.92 |  | 0.30 |  | 1.12 |  | 0.97 |  |
| 7 |  | 2.63 |  | 2.23 |  | 2.16 |  | 1.45 |  | 2.05 |  | 1.97 |  |
| 8 |  | 2.95 |  | 2.85 |  | 2.62 |  | 2.70 |  | 2.72 |  | 2.17 |  |
| 9 |  | 2.80 |  | 2.64 |  | 2.65 |  | 2.10 |  | 2.83 |  | 2.28 |  |
| 10 |  | 2.05 |  | 2.54 |  | 2.05 |  | 1.70 |  | 2.19 |  | 1.23 |  |
| 11 |  | 2.95 |  | 2.77 |  | 2.56 |  | 2.90 |  | 2.83 |  | 2.40 |  |
| 12 |  | 2.73 |  | 2.16 |  | 2.49 |  | 3.20 |  | 2.58 |  | 3.28 |  |
| 13 |  | 3.11 |  | 2.54 |  | 2.56 |  | 3.10 |  | 2.75 |  | 2.34 |  |
| 14 |  | 3.10 |  | 2.85 |  | 2.70 |  | 2.70 |  | 2.74 |  | 2.14 |  |
| 15 |  | 2.88 |  | 2.69 |  | 2.38 |  | 2.55 |  | 2.57 |  | 2.52 |  |
|  | Mean |  | 2.69 |  | 2.61 |  | 2.43 |  | 2.37 |  | 2.55 |  | 2.17 |
|  | Std Dev |  | 0.65 |  | 0.43 |  | 0.58 |  | 0.90 |  | 0.58 |  | 0.63 |
| Consideration Dimension |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 |  | 3.50 |  | 3.15 |  | 3.54 |  | 3.85 |  | 3.25 |  | 3.58 |  |
| 17 |  | 3.38 |  | 3.15 |  | 3.62 |  | 4.00 |  | 3.25 |  | 3.89 |  |
| 18 |  | 3.13 |  | 2.46 |  | 3.37 |  | 3.45 |  | 3.11 |  | 2.66 |  |
| 19 |  | 3.05 |  | 3.00 |  | 2.70 |  | 3.55 |  | 2.96 |  | 2.83 |  |
| 20 |  | 2.91 |  | 2.69 |  | 2.57 |  | 3.45 |  | 2.59 |  | 2.32 |  |

TABLE III (Continued)

| Item |  | $\begin{gathered} \text { D2 } \\ (44) \end{gathered}$ |  | $\begin{gathered} \text { D3 } \\ (13) \end{gathered}$ |  | $\begin{gathered} \mathrm{H} 2 \\ (39) \end{gathered}$ |  | $\begin{gathered} \text { H3 } \\ (22) \end{gathered}$ |  | $\begin{gathered} \text { F2 } \\ \text { (53) } \end{gathered}$ |  | $\begin{gathered} \text { F3 } \\ (35) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 |  | 2.73 |  | 2.92 |  | 2.90 |  | 2.72 |  | 2.66 |  | 2.83 |  |
| 22 |  | 3.43 |  | 3.00 |  | 3.59 |  | 3.90 |  | 3.31 |  | 3.52 |  |
| 23 |  | 3.32 |  | 3.00 |  | 3.35 |  | 4.00 |  | 3.09 |  | 3.14 |  |
| 24 |  | 2.84 |  | 2.46 |  | 2.92 |  | 3.00 |  | 2.67 |  | 2.58 |  |
| 25 |  | 3.48 |  | 3.00 |  | 3.52 |  | 3.75 |  | 3.06 |  | 3.52 |  |
| 26 |  | 3.09 |  | 3.00 |  | 2.81 |  | 3.40 |  | 2.80 |  | 3.26 |  |
| 27 |  | 2.55 |  | 2.39 |  | 2.54 |  | 3.45 |  | 2.51 |  | 2.51 |  |
| 28 |  | 2.68 |  | 2.23 |  | 2.59 |  | 2.65 |  | 3.17 |  | 3.06 |  |
| 29 |  | 3.25 |  | 2.77 |  | 3.14 |  | 3.20 |  | 2.68 |  | 2.60 |  |
| 30 |  | 2.50 |  | 2.54 |  | 2.67 |  | 2.95 |  | 2.53 |  | 2.52 |  |
|  |  |  | 3.06 |  | 2.78 |  | 3.06 |  | 3.42 |  | 2.91 |  | 2.99 |
|  | Std Dev |  | 0.34 |  | 0.30 |  | 0.41 |  | 0.44 |  | 0.29 |  | 0.48 |
|  | Grand Mean |  | 2.88 |  | 2.70 |  | 2.74 |  | 2.90 |  | 2.73 |  | 2.58 |
|  | Grand Std Dev |  | 0.54 |  | 0.38 |  | 0.59 |  | 0.88 |  | 0.48 |  | 0.69 |

D2 = Mean score on the item for all deans whose department heads were selected by Method 2.
H3 = Mean score on the item for all department heads who were selected by Method 3.
Grand Mean $=$ Mean on all 30 items.
mean score and standard deviation were computed from responses on each dimension of the LBDQ. For the deans and department heads, the four mean scores noted below were tabulated (derived from Table III) on the Initiating Structure dimension of the LBDQ (see Figure 10). Keep in mind that no respondents selected Method 1 or Method 4, thus those cells were empty. A t-test was performed on D2 with H2 and on D3 with H3 to see whether there was significant difference between these means. For D3 with H3 note that 0.032 in the last column of the t-test results is less than 0.05 (see Figure 11). It was therefore concluded that the difference between the means of cells D3 and H3 were statistically significant. The means of D2 and H2 also proved to be statistically significant. These results indicate that deans perceived department heads an initiating structure significantly more often that the heads saw themselves as doing, regardless of the method that was used in selecting the head.

|  | Selection Method |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Respondents | D1 $\theta$ | $\begin{gathered} D 2 \\ \bar{x}=2.69 \end{gathered}$ | $\begin{gathered} \text { D3 } \\ \bar{x}=2.61 \end{gathered}$ | D4 $\theta$ |
|  | H1 $\theta$ | H 2 $\bar{x}=2.43$ | H3 $\bar{x}=2.37$ | H4 $\theta$ |

Figure 10. Mean Scores on Initiating Structure Dimension for Deans and Department Heads According to the Method of Selection of Department Heads

|  |  |  | Pooled <br> Variance Estimate |  | Separate <br> Variance |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fstimate |  |  |  |  |  |

Figure 11. T-Tests on D2 With H2 and D3 With H3. Both Were Statistical17 Significant at 0.05 Level

Research Question 8: This research question considered department heads and faculty members regarding the Initiating Structure dimension of the LBDQ. A t-test was performed on the mean scores of these two groups and a significant difference was found between them (see Figures 12 and 13).

| Heads | Faculty |
| :---: | :---: |
| $\bar{x}=2.321$ | $\bar{x}=2.413$ |

Figure 12. Mean Scores for Department Heads and Faculty Members in the Initiating Structure Dimension of the LBDQ

|  |  | ```Pooled Variance Estimate``` |  | Separate Variance Estimate |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| F Values | $\begin{aligned} & \text { 2-Tai1 } \\ & \text { Prob. } \end{aligned}$ | $\stackrel{t}{\text { Value }}$ | 2-Tail Prob. | $\stackrel{t}{\text { Value }}$ | $\begin{aligned} & \text { 2-Tail } \\ & \text { Prob. } \end{aligned}$ |
| 3.67 | 0.134 | -2.46 | 0.028 | -2.57 | 0.026 |

Figure 13. T-Tests on Department Head's and Faculty Member's Scores on the Initiating Structure Dimension of the LBDQ

That is, faculty members saw department heads as initiating structure significantly more often than the heads saw themselves as doing. Did this situation remain the same when one took into account the method of selection of department heads? To answer this question, department heads and faculty members were divided into two groups according to method of selection. Recall again that no department head was selected by either Method 1 or Method 4 identified earlier in this study, hence those cells were empty. T-tests were performed on the means of F 2 with H2 and on the means of F3 with H3 to determine whether there were significant differences. Both sets of means were found to be significantly different as the 0.05 level (see Figures 14 and 15). That is, faculty members saw department heads as initiating structure more often to a significant different degree regardless of the method used in the selection of the department head.

| Respondents | Heads | H1 <br> $\theta$ | H2 <br> $\bar{x}=2.43$ | H3 <br> $\bar{x}=2.37$ | H4 <br> $\theta$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Faculty | F1 | F2 |  |  |
| $\theta$ | $\bar{x}=2.55$ | F3 | F4 |  |  |

Figure 14. Mean Scores on Initiating Structure Dimension for Department Heads and Faculty Members According to the Method of Selection of Department Heads

|  |  |  | Pooled Variance Estimate |  | Separate Variance Estimate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { F } \\ \text { Value } \end{gathered}$ | $\begin{aligned} & \text { 2-Tail } \\ & \text { Prob. } \end{aligned}$ | $\stackrel{t}{\text { value }}$ | 2-Tail Prob. | $\stackrel{t}{\text { value }}$ | $2-T a i 1$ <br> Prob. |
| F2 with H2 | 5.69 | 0.050 | -2.76 | 0.016 | -2.90 | 0.016 |
| F3 with H3 | 10.56 | 0.011 | -3.68 | 0.003 | -3.90 | 0.005 |

Figure 15. T-Tests on F2 With H2 and F3 With H3 on the Initiating Structure Dimension of the LBDQ. Both Were Significantly Different at 0.05 Level

Research Question 9: This question considered deans and faculty regarding the Initiating Structure dimension of the LBDQ. Both deans and faculty saw department heads as initiating structure significantly more other than the department heads saw themselves as doing. A t-test was performed on the mean score of deans with the mean score of faculty. The means were found to be significantly different (see Figures 16 and 17). That is, not only did deans and faculty members see department heads as initiating structure significantly more often that the heads
saw themselyes as doing, but deans saw this activity as occurring significantly more often that faculty did.

| Deans | Heads | Faculty |
| :---: | :---: | :---: |
| $\bar{x}=2.692$ | $\bar{x}=2.321$ | $\bar{x}=2.413$ |

Figure 16. Mean Scores for Deans, Department Heads, and Faculty on the Initiating Structure Dimension of LBDQ

|  |  | ```Pooled Variance Estimate``` |  | Separate <br> Variance Estimate |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\stackrel{\text { F }}{\text { value }}$ | $\begin{aligned} & \text { 2-Tail } \\ & \text { Prob. } \end{aligned}$ | $\stackrel{t}{\text { value }}$ | 2-Tail <br> Prob. | Value | $\begin{aligned} & \text { 2-Tail } \\ & \text { Prob. } \end{aligned}$ |
| 5.90 | 0.046 | -2.35 | 0.035 | -2.47 | 0.033 |

Figure 17. T-Tests on Deans' and Faculty Members' Mean Scores on the Initiating Structure Dimension of the LBDQ

Both deans and faculty members were divided into two groups according to method of selection of department heads. For each of the four groups thus obtained (two for deans and two for faculty), a mean score was computed for the responses on the Initiating Structure dimension of the LBDQ. T-tests were performed on D2 with F2 and D3 with F3 to see whether there were significant differences. There was a significant difference between the means of cells D2 and F2. That is, when depart-
ment heads were chosen via Method 2 (see page 5), deans saw heads as initiating structure significantly more often than faculty members did. The means of cells D3 with F3 were not statistically significant. That is, when department heads were chosen via selection Method 3 (see page 5), deans and faculty had virtually the same perception of the heads' initiating structure behavior.

| Selection Method |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Deans | D1 $\theta$ | $\bar{x}=\begin{gathered}\text { D2 } \\ 2.69\end{gathered}$ | $\begin{gathered} \mathrm{D} 3 \\ \bar{x}=2.61 \end{gathered}$ | D4 $\theta$ |
| Respondents $\quad$ Faculty | F1 $\theta$ | F2 $\bar{x}=2.55$ | ¢ $=$ $=2.17$ | F4 $\theta$ |

Figure 18. Mean Scores of Deans and Faculty Members According to Method of Selection of Their Department Heads

|  |  |  | Pooled Variance Estimate |  | Separate Variance Estimate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { F } \\ \text { Value } \end{gathered}$ | $\begin{aligned} & \text { 2-Tail } \\ & \text { Prob. } \end{aligned}$ | $\stackrel{t}{\text { Value }}$ | 2-Tail Prob. | $\stackrel{\text { t }}{\text { value }}$ | $\begin{aligned} & \text { 2-Tai1 } \\ & \text { Prob. } \end{aligned}$ |
| D2 with F2 | 4.92 | 0.070 | -3.20 | 0.007 | -3.36 | 0.007 |
| D3 with F3 | 3.86 | 0.120 | -1.16 | 0.268 | -1.21 | 0.253 |

Figure 19. T-Tests on D2 with F2 and D3 With F3. There is a Significant Difference Between D2 and F2, But None Between D3 and F3

For the last three research questions, respondents' scores were
analyzed ${ }^{2}$ on the Initiating Structure dimension of the LBDQ. In the next three research questions, similar analysis was conducted for the Consideration dimension of the LBDQ.

Research Question 10: In Table IV mean scores for deans, department heads, and faculty members are noted regarding the Consideration dimension of the LBDQ. The mean score for department heads was the highest of the three. A t-test was conducted on the mean score of deans and that of department heads to see whether the difference between them was statistically significant (see Table V), and a significant difference was found. That is, department heads saw themselves as being considerate significantly more often than deans saw them as being. Next, deans and department heads were divided into groups corresponding to the method of selection of department heads. This gave two sub-groups for deans and two for department heads. For each sub-group, a mean score was computed for the Consideration dimension of the LBDQ (see Table VI). Two t-tests were performed on the means of cells D2 with H2 and D3 with H3. Both pairs were found to be significantly different. That is, department heads saw themselves as being considerate significantly more often than deans saw the heads as being considerate no matter which method of selection had been used.

TABLE IV

> MEAN SCORES OF DEANS, DEPARTMENT HEADS, AND
> FACULTY MEMBERS AT THE CONSIDERATION
> DIMENSION OF THE LBDQ

| Deans | Heads | Faculty |
| :---: | :--- | :---: |
| $\bar{x}=2.983$ | $\bar{x}=3.148$ | $\bar{x}=2.963$ |

Research Question 11: The scores of department heads and those of faculty members regarding the Consideration dimension of the LBDQ were analyzed. A t-test was performed on the two mean scores to see whether there was a significant difference between them. (See Table $V$ for the results of the t-test.) Since 0.086 was greater than 0.05 (the chosen probability level), the column labeled "Pooled Variance Estimate" was used. In that column 0.044 was less than 0.05 , therefore it was noted that a significant difference existed between heads' and faculty's scores. Department heads saw themselves as being considerate significantly more often than faculty saw them as being. Both heads and faculty were divided into sub-groups according to the method of selection of department heads. For each sub-group, the mean score on Consideration was calculated (see Table VI). T-tests were performed on the means of the cells of H2 with F2 and H3 with F3 (see Table VII for results). The means of the cells of H2 and F2 were found to be statistically significant. That is, department heads chosen by Method 2 saw themselves as being considerate significantly more often than their faculty members did. The means H3 and F3 were found not to be statistically significant. That is, for department heads chosen by Method 3,

TABLE V
T-TESTS ON DEANS WITH HEADS, HEADS WITH FACULTY, AND DEANS WITH FACULTY ON THE CONSIDERATION DIMENSION OF THE LBDQ

|  |  |  | Pooled <br> Variance Estimate |  | Separate <br> Variance Estimate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { F } \\ \text { value } \end{gathered}$ | 2-Tail Prob. | $\begin{gathered} \mathrm{t} \\ \text { value } \end{gathered}$ | 2-Tail Prob. | $\stackrel{t}{\text { value }}$ | 2-Tail <br> Prob. |
| Deans with Heads | 1.39 | 0.674 | -3.93 | 0.002 | -3.88 | 0.002 |
| Heads with Faculty | 4.12 | 0.086 | -2.23 | 0.044 | -2.13 | 0.065 |
| Deans with Faculty | 1.64 | 0.530 | -2.47 | 0.028 | -2.43 | 0.033 |

TABLE VI
MEAN SCORES ON CONSIDERATION DIMENSION FOR DEANS, DEPARTMENT HEADS, AND FACULTY MEMBERS ACCORDING TO THE METHOD OF SELECTION OF DEPARTMENT HEADS

| Respondents | Deans | $\begin{gathered} \mathrm{D} 1 \\ \theta \end{gathered}$ | $\begin{gathered} D 2 \\ \bar{x}=3.06 \end{gathered}$ | $\begin{gathered} D 3 \\ \bar{x}=2.78 \end{gathered}$ | D4 $\theta$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Heads | $\begin{gathered} H 7 \\ \theta \end{gathered}$ | $\begin{gathered} \mathrm{H} 2 \\ \overline{\mathrm{x}}=3.06 \end{gathered}$ | $\begin{gathered} \mathrm{H} 3 \\ \bar{x}=3.42 \end{gathered}$ | $H 4$ $\theta$ |
|  | Faculty | F1 $\theta$ | $\begin{gathered} F 2 \\ \bar{x}=2.91 \end{gathered}$ | $\begin{gathered} \text { F3 } \\ \bar{x}=2.99 \end{gathered}$ | F4 |
|  |  | 1 | 2 | 3 | 4 |

## TABLE VII

T-TESTS ON D2 WITH H2, H2 WITH F2, D2 WITH F2, D3 WITH H3, H3 WITH F3, AND D3 WITH F3 ON THE CONSIDERATION DIMENSION OF THE LBDQ

|  |  |  | Pooled <br> Variance Estimate |  | Separate <br> Variance Estimate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { F } \\ \text { Value } \end{gathered}$ | $\begin{aligned} & \text { 2-Tai1 } \\ & \text { Prob. } \end{aligned}$ | $\stackrel{t}{\text { value }}$ | $\begin{aligned} & \text { 2-Tai1 } \\ & \text { Prob. } \end{aligned}$ | $\begin{gathered} \mathrm{t} \\ \text { value } \end{gathered}$ | 2-Tail <br> Prob. |
| D2 with H2 | 1.31 | 0.724 | -8.93 | 0.000 | -8.84 | 0.000 |
| H2 with F2 | 3.16 | 0.158 | -3.98 | 0.002 | -3.84 | 0.004 |
| D2 with F2 | 1.21 | 0.799 | -2.85 | 0.013 | -2.84 | 0.015 |
| D3 with H3 | 2.06 | 0.396 | -4.51 | 0.001 | -4.62 | 0.001 |
| H3 with F3 | 2.59 | 0.239 | -2.08 | 0.058 | -2.02 | 0.071 |
| D3 with F3 | 1.95 | 0.403 | -1.97 | 0.070 | -1.93 | 0.080 |

they perceived themselves as giving consideration not significantly differently than their faculty members saw them giving.

Research Question 12: Do deans and faculty members agree regarding the consideration behavior of department heads? On Table IV it is noted that the mean score for deans was $\bar{x}=2.983$ and for faculty $\bar{x}=2.963$. $A$ t-test demonstrated that these two mean scores were statistically significant (see Table V). That is, not only did deans and faculty see department heads as being less considerate, but faculty saw heads as significantly less considerate than deans did. Are such preceptions affected by method of selection of department heads? To answer this question, both deans and faculty were divided into sub-groups corresponding to the method of selection of their department heads. A mean score on Consideration of the heads was calculated for each such group (see Table VI). Two t-tests were performed, one on D2 with F2, the other on D3 with F3. D2 and F2 were found to be significantly different at the 0.05 level, while D3 and F3 were not. That is, while deans and faculty agreed that department heads were less considerate than they should be, according to faculty, the situation was even more of a problem when the heads were chosen by Method 2 (see page 5 of this thesis for selection methods). Thus the significant difference found between deans and faculty actually was related to the method of selection.

Research Question 13: The loyalty of department heads to their academic departments was accessed by the single item "How much loyalty do you feel toward your academic department?" (See Appendix B, Item \#47. $a=0, b=1, c=2, d=3, e=4$.) Department heads were subgrouped according to method of selection, and a one-way analysis of variance was performed to determine whether there was a relationship between method
of selection and mean scores on the loyalty item (see Figure 20). No significant difference was found. That is, method of selection had no significant effect on department heads' loyalty to their academic departments.

| $\bar{x}_{1}$ <br> $\theta$ | $\bar{x}_{2}$ <br> $=$ <br> $\bar{x}_{3}$ | $\bar{x}_{4}$ <br> $\theta$ |  |
| :--- | :---: | :---: | :---: |
| 1 | 2 | 3054 | $=0.2500$ |

Figure 20. Department Heads' Mean Score on Loyalty According to Their Method of Selection

Research Question 14: Faculty members were subgrouped according to selection method of their department head. For each subgroup, a mean score was calculated for their loyalty to their academic department. Then a one-way analysis of variance was performed to determine whether there was a relationship between the department head's method of selection and his or her faculty members' loyalty to their academic department. No significant difference was found. That is, a faculty member's loyalty to his or her academic department was not significantly affected by the selection method used to identify the head.

Research Question 15: Does method of selection affect a department head's effectiveness? Department heads' levels of effectiveness perceived by their faculty members were established by a single item "My department head provides effective leadership." (See Appendix A, item
\#56. $a=4, b=3, c=2, d=1, e=0$.) Faculty members were subgrouped according to their department heads' method of selection. For each such subgroup a mean score was computed. A one-way analysis of variance was performed to determine whether there was a significant difference. None was found. That is, method of selection of a department head did not significantly influence his or her effectiveness as perceived by the faculty members of his or her department.

Research Question 16: Is there a significant difference between the method of selection and the emotional detachment of the department head as perceived by deans? A single item "When things don't go smoothly, he or she loses his or her temper" was used to access department heads' emotional detachment. A one-way analysis of variance was performed on deans' assessment of the emotional detachment of their department heads. No significant difference was found between method of selection and emotional detachment of department heads as perceived by their deans.

Research Question 17: Is there a significant difference between the method of selection and the emotional detachment of the department head as perceived by faculty members? The emotional detachment for department heads as perceived by their faculty members was considered here. Again, a one-way analysis of variance yielded no significant difference between method of selection of a department head and his or her emotional detachment as perceived by his or her faculty.

Research Question 18: Is there a significant difference between method of selection and department head's authoritarianism scores? For this question, analysis was made on department heads' authoritarianism scores as perceived by deans, faculty, as well as by the heads them-
selves. The authoritarism scale was an eight-item instrument (see Appendix G). Table VIII gives the respondents' mean scores on each item of the Authoritarianism scale, as well as mean scores for deans, heads, and faculty on the whole scale. T-tests were performed on deans' with heads' scores, heads' with faculty's scores, and deans' with faculty's scores to determine if there were any significant differences. Mean scores of deans, heads, and faculty on the whole Authoritarian instrument are in Table IX, and Table $X$ gives the t-test results. There was no significant difference between deans' and department heads' scores. That is, deans saw heads as much authoritarian as heads saw themselves as being. Similar findings were obtained on heads' and faculty's scores. The picture changed when one looked at deans' and faculty's scores. Deans saw department heads as being more authoritarianthan faculty saw, and the difference in perceptionwas statistically significant at the 0.05 level.

Does method of selection (of department head) affect deans', heads', or faculty's perception on heads' authoritarianism? To answer this question, deans, heads, and faculty were subgrouped according to the method of selection of department heads. (See Table XI for the mean score of each subgroup on each item of the Authoritarianism instrument, and see Table XII for the mean score of each subgroup on the whole instrument.) In Table XIII there are six t-test results. D2 with F2 was the only one of the six results that had statistical significance. This means that the difference in perception (on heads' authoritarianism) between deans and faculty was related to Method 2 rather than Method 3. That is, when a department head was selected via Method 2 (see page 5 of this thesis), the dean saw him or her as being significantly more authoritarian than his or her faculty members saw.

TABLE VIII
RESPONDENTS' MEAN SCORES ON EACH ITEM OF THE AUTHORITARIANISM INSTRUMENT

| I tem |  | $\begin{aligned} & \text { Deans } \\ & (57) \end{aligned}$ |  | Dept. Heads (61) |  | $\begin{gathered} \text { Faculty } \\ (92) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | 1.828 |  | 1.356 |  | 1.596 |  |
| 2 |  | 1.121 |  | 0.678 |  | 1.045 |  |
| 3 |  | 3.259 |  | 3.593 |  | 3.112 |  |
| 4 |  | 1.810 |  | 1.441 |  | 1.450 |  |
| 5 |  | 1.483 |  | 1.339 |  | 1.124 |  |
| 6 |  | 1.069 |  | 0.831 |  | 0.0708 |  |
| 7 |  | 1.138 |  | 1.068 |  | 1.247 |  |
| 8 |  | 3.517 |  | 3.254 |  | 3.360 |  |
|  | Mean |  | 1.903 |  | 1.695 |  | 1.626 |
|  | Std. Dev. |  | 0.966 |  | 1.103 |  | 1.095 |

TABLE IX
MEAN SCORES OF DEANS, DEPARTMENT HEADS, AND FACULTY ON THE AUTHORITARIANISM SCALE

| Deans | Heads | Faculty |
| :---: | :---: | :---: |
| $\bar{x}=1.903$ | $\bar{x}=1.695$ | $\bar{x}=1.626$ |

TABLE X
T-TESTS ON DEANS WITH HEADS, HEADS WITH FACULTY, AND FACULTY WITH DEANS ON THE AUTHORITARIAN SCALE

|  |  |  | Pooled <br> Variance Estimate |  | Separate Variance Estimate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { F } \\ \text { Value } \end{gathered}$ | $\begin{aligned} & \text { 2-Tai1 } \\ & \text { Prob. } \end{aligned}$ | $\stackrel{t}{\text { value }}$ | 2-Tail <br> Prob. | $\stackrel{\mathrm{t}}{\text { value }}$ | 2-Tail <br> Prob. |
| Deans with Heads | 16.65 | 0.045 | -2.36 | 0.056 | -2.36 | 0.099 |
| Heads with Faculty | 16.65 | 0.045 | -2.36 | 0.056 | -2.36 | 0.099 |
| Deans with Faculty | 3.40 | 0.342 | -2.66 | 0.037 | -2.66 | 0.045 |

TABLE XI
MEAN SCORES OF RESPONDENTS ON EACH ITEM OF THE AUTHORITARIANISM SCALE ACCORDING TO THE METHOD OF SELECTION OF THE DEPARTMENT HEAD

| I tem |  | $\begin{gathered} D 2 \\ (44) \end{gathered}$ |  | $\begin{gathered} \text { D3 } \\ \text { (13) } \end{gathered}$ |  | $\begin{gathered} \mathrm{H} 2 \\ (39) \end{gathered}$ |  | $\begin{gathered} \text { H3 } \\ (22) \end{gathered}$ |  | $\begin{gathered} F 2 \\ (55) \end{gathered}$ |  | $\begin{gathered} \text { F3 } \\ (37) \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | 1.773 |  | 2.077 |  | 1.541 |  | 0.950 |  | 1.717 |  | 1.400 |  |
| 2 |  | 0.977 |  | 1.615 |  | 0.919 |  | 0.300 |  | 1.113 |  | 0.971 |  |
| 3 |  | 3.318 |  | 3.000 |  | 3.351 |  | 4.000 |  | 3.094 |  | 3.143 |  |
| 4 |  | 1.750 |  | 2.000 |  | 1.489 |  | 1.500 |  | 1.755 |  | 1.000 |  |
| 5 |  | 1.500 |  | 1.461 |  | 1.324 |  | 1.400 |  | 1.340 |  | 0.800 |  |
| 6 |  | 1.114 |  | 0.923 |  | 0.730 |  | 1.000 |  | 0.774 |  | 0.600 |  |
| 7 |  | 1.068 |  | 1.461 |  | 1.486 |  | 0.300 |  | 1.359 |  | 1.114 |  |
| 8 |  | 3.705 |  | 2.846 |  | 3.162 |  | 3.350 |  | 3.189 |  | 3.600 |  |
|  | Mean |  | 1.901 |  | 1.923 |  | 1.750 |  | 1.600 |  | 1.793 |  | 1.578 |
|  | Std. Dev. |  | 1.044 |  | 0.713 |  | 0.975 |  | 1.365 |  | 0.890 |  | 1.137 |

D2 = Mean score on the item for all deans whose department heads were selected by Method 2.
H3 = Mean score on the item for all department heads who were selected by Method 3.
Mean $=$ Mean on all 8 items for that particular subgroup.

TABLE XII
MEAN SCORES OF RESPONDENTS ON THE AUTHORITARIAN SCALE ACCORDING TO THE METHOD OF SELECTION OF DEPARTMENT HEADS

| Respondents | Deans | D1 | D2 | D3 | D4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\theta$ | $\bar{x}=1.901$ | $\bar{x}=1.923$ | $\theta$ |
|  | i | H1 | H2 | H3 | H4 |
|  | Heads | $\theta$ | $\bar{x}=1.750$ | $\bar{x}=1.600$ | $\theta$ |
|  | Faculty | F1 | F2 | F3 | F4 |
|  |  | $\theta$ | $\bar{x}=1.793$ | $\bar{x}=1.578$ | $\theta$ |
|  |  | 1 | 2 | 3 | 4 |

TABLE XIII
T-TESTS ON D2 WITH H2, WITH F2, D2 WITH F2, D3 WITH H3, H3 WITH F3, AND D3 WITH F3 ON THE AUTHORITARIAN SCALE

|  |  |  | ```Pooled Variance Estimate``` |  | Separate <br> Variance Estimate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { F } \\ \text { Value } \end{gathered}$ | $\begin{aligned} & \text { 2-Tail } \\ & \text { Prob. } \end{aligned}$ | $\stackrel{t}{\text { value }}$ | $\begin{aligned} & \text { 2-Tail } \\ & \text { Prob. } \end{aligned}$ | $\stackrel{t}{\text { value }}$ | $\begin{aligned} & \text { 2-Tai } 1 \\ & \text { Prob. } \end{aligned}$ |
| D2 with H2 | 8.29 | 0.116 | -2.38 | 0.055 | -2.38 | 0.076 |
| H2 with F2 | 8.29 | 0.116 | -2.38 | 0.055 | -2.38 | 0.076 |
| D2 with F2 | 8.90 | 0.106 | -3.02 | 0.024 | -3.02 | 0.039 |
| D2 with F2 | 8.90 | 0.106 | -3.02 | 0.024 | -3.02 | 0.039 |
| D3 with H3 | 7.15 | 0.140 | -2.19 | 0.071 | -2.19 | 0.094 |
| H3 with F3 | 10.93 | 0.080 | -1.17 | 0.287 | -1.17 | 0.307 |
| D3 with F3 | 2.57 | 0.459 | -2.01 | 0.091 | -2.01 | 0.101 |

${ }^{1}$ In a bureaucratic setting, faculty members might be considered subordinates and the dean the superordinate of the department head. To discharge his or her duties and responsibilities, the department head must interact with his or her subordinates as well as with his or her superior.
${ }^{2}$ The respondents for this study were 57 deans, 61 department heads, and 92 faculty members.

## CHAPTER V

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

In American higher education, the academic department occupies the elemental level of academic and administrative life that lies between individual faculty members and the deans of an institution's schools or colleges. The academic department is the basic unit of administrative structure in the university. It is, however, much more than an administrative convenience. It is home base for faculty members. Recruiting, promotion, and retention of academic staff is conducted within the academic department. It is less of a threatening experience for the new staff member in the department to find him- or herself surrounded by peers working in the same academic discipline who give him or her informal orientation and encouragement for professional growth. The academic department is home base for students as well. Louis Benezet noted that the "pea-green freshman" felt better if he could introduce himself in the dorm as a "chem major" even before he had taken his first course. Additional activities that take place at the departmental level include curriculum revision, student admission, class scheduling, grading standards and practices, new faculty orientation, and secretarial services for faculty members.

University presidents, vice-presidents, and deans have great influence on academic planning through the decisions they make regarding departmental programs, but the operating unit for educational leadership
remains the academic department and its leader, the department head. The department head serves as a communication link, transmitting information for administration to faculty and from faculty to administration. He or she transmits concerns, needs, interpretations to and from faculty and dean. Thus, in the course of carrying out his or her roles and responsibilites, the academic department head interacts with faculty members in the department as well as the dean of the school or college of which the department is a part. It was for this reason that this study on the selection of department heads included faculty members and deans, as well as department heads. More rational selection methods, it was contended by the researcher, would serve to improve the quality of academic department heads in doctorate-granting universities.

Brann listed four methods by which department heads were commonly selected:

1. Appointed by the dean or president or someone in the central administration.
2. Chosen by the dean in consultation with departmental faculty.
3. Elected by fellow faculty members.
4. Rotated among senior or tenured faculty of the department, each of whom holds office for a specified term.

Given that there are at least three methods of selecting department heads, and assuming that a particular type of department head is being sought at any particular time, will a department get the particular type of head it requires regardless of which method of selection it uses? Specifically, what type of department head is each selection method likely to produce?

## Findings

The study was restricted to Doctorate-Granting Universities of the United States as defined by the Carnegie Council on Policy Studies in Higher Education (see page 48). The following are some of the study's findings:

1. Of the four methods of selecting academic department heads (as outlined above), only two were in operation in the random sample selected for this study. Namely, Method 2--chosen by dean or president with faculty consultation--and Method 3--elected by fellow faculty members. Method 2 appeared more frequently (64\%) than Method 3 in the sample. Of the 61 department heads who participated in the study, 39 were chosen via Method 2, while 22 were chosen via Method 3.
2. Deans and faculty members perceived department heads initiating structure much more often than heads perceived themselves as doing so, no matter which method of selection had been used to select the head. Moreover, according to deans and faculty, heads initiated structure significantly more often than the heads perceived themselves as doing. Furthermore, a t-test revealed significant difference between deans' and faculty members' perceptions of the initiating structure behavior of department heads. That is, not only did deans and faculty members see department heads as initiating structure significantly more often than heads saw themselves as doing, but, in addition, deans saw this activity as occurring significantly more often than faculty did. Further analysis revealed that the significant difference obtained was related to method of selection. When department heads were chosen via Method 3 (elected by fellow faculty members), deans and faculty had virtually the same perception of
the heads' initiating structure behavior. However, when heads were chosen via selection Method 2 (chosen by the dean in consultation with departmental faculty, deans saw heads initiating structure significantly more often than faculty members did.
3. On the Consideration dimension of the LBDQ, the mean score of department heads was the highest of the three (see Table IV). That is, both deans and faculty saw less consideration on the part of heads than heads saw themselves as offering. The situation remained the same regardless of method of selection. Moreover, according to faculty, consideration was even less when the head was chosen via Method 2 (chosen by the dean in consultation with departmental faculty). This suggested that a department head chosen via Method 2 had been seen by faculty as more representing the administrative viewpoint. Thus, the perceptions of deans and faculty members on department heads' consideration was found to be related to method of selection.
4. The loyalty of department heads to their academic department was assessed by the single item "How much loyalty do you feel towards your academic department?" There was no significant difference between the responses given by heads chosen via Method 2 and those chosen via Method 3. That is, the loyalty of department heads to their academic department was virtually independent of method of selection of the heads. This suggested that in Doctorate-Granting Universities department heads had a high degree of loyalty (mean scores were $\bar{x}=3.5946$ and $\bar{x}=3.7500$ respectively) to their academic department no matter which method of selection was used.
5. A single item "My department head provides effective leadership" was used to assess department heads' level of effectiveness as perceived by faculty members in the departments. No significant difference was
found between responses of faculty whose heads were chosen via Method 2 and those whose heads were chosen via Method 3. That is, method of selection of a department head did not significantly influence his or her effectiveness as perceived by the faculty members of his or her department. Deans were also asked to respond to the effectiveness item. Again, no significant difference was found between the responses of deans whose heads were chosen via Method 3. Method of selection of a department head did not significantly influence his or her effectiveness as perceived by the dean.
6. Emotional detachment of department heads was assessed by a single item question "When things don't go smoothly, he or she loses his or her temper." A one-way analysis of variance revealed that there was no significant difference between method of selection and emotional detachment of department heads as perceived by their deans. Faculty members' responses to the emotional detachment item were also analyzed using oneway analysis of variance. Again, no significant difference was found between the responses of faculty whose department heads were chosen via Method 2 and those whose heads were chosen via Method 3. That is, both dean and faculty saw virtually the same level of emotional detachment in the department head, no matter which method of selection was used to obtain the head.
7. The level of authoritarianism of department heads was established using an eight-item questionnaire administered to deans, faculty, as well as the heads themselves. The highest mean score was the deans', followed by that of department heads. Faculty's mean score was the lowest of the threee. That is, department heads saw themselves as being more authoritarian than what their faculty saw, but less authoritarian
than what their deans saw. T-test results revealed that the difference between deans' and heads' scores, and that between heads' and faculty's scores were not statistically significant. Even after taking into account the method of selection, t-test results still showed no significant differences. Such findings suggest that deans and heads, as well as heads and faculty, saw approximately the same level of authoritarianism in the department head, no matter which method used was used to obtain the incumbent. The picture changed, however, when one compared deans' with faculty's scores of the head's authoritarianism. Here t-test results showed a significant difference between deans' and faculty's scores of heads' authoritarianism. A closer analysis revealed that the difference was related to method of selection. When the head was chosen via Method 3, deans' scores were virtually the same as faculty's scores of the heads' authoritarianism. When the head was chosen via Method 2 (chosen by the dean in consultation with departmental faculty), the dean saw him or her as being significantly more authoritarian than his or her faculty members did.

## Conclusions

The following conclusions seem appropriate from the findings of this study:

1. At the time this study was conducted, Doctorate-Granting Universities were using two primary methods for selecting their department heads, and whichever way one selected the head, the individual so selected always was perceived as initiating structure.
2. Deans and faculty members agreed that department heads initiated structure no matter which of the two primary methods of selection was
used to select the head. This conclusion follows from the findings that mean scores of deans and faculty were both higher on initiating structure than on consideration of department heads. This conclusion still remained true after method of selection was accounted for. Faculty saw much less consideration when the head was selected via Method 2 (selected by dean).
3. The loyalty of department heads to their academic department was found not to be significantly affected by method of selection of the department head. Mean score on a loyalty item for heads chosen via Method 2 was virtually the same as that of heads chosen via Method 3. Thus, in Doctorate-Granting Universities department heads were loyal to their academic department no matter which method of selection was used to select the head. Stewart, Hoy, and Miskel have noted some conflict between loyalty to one's academic discipline and loyalty to one's organization (e.g., the academic department).2,3 This study did not find support for such a conclusion with regard to Doctorate-Granting Universities.
4. Department heads' effectiveness (as perceived by the dean and faculty of the department) was found not to be influenced by method of selection of the head; neither was the head's emotional detachment. Thus, in Doctorate-Granting Universities, department heads were perceived as being effective and displaying a high degree of emotional detachment.
5. Department heads' level of authoritarianism was perceived differently by the dean and faculty of the department. When the head was chosen via Method 2 (selected by dean) the dean saw him or her as being more authoritarian than his or her faculty saw the head as being. This was one of the few instances in this study when contrasting perceptions were found. It was reasonable for the dean to expect a certain
degree of authoritarianism in the head he or she had chosen. However, some explanation may be needed for the observation that the dean actually saw more authoritarianism in the department head than faculty in his or her department saw. Findings of a similar nature were reported by Dennison. 4

4 Dennison found that school administrators in California appeared to have more confidence than teachers in the selection procedure they were using to secure school principals. This phenomenon appears to be a self-fulfilling prophecy on the part of deans in this study and school administrators in Dennison's study.
6. It was stated above that deans and faculty perceived less consideration on the part of department heads; faculty saw even less consideration when the head was selected via Method 2 (selected by dean in consultation with departmental faculty); and dean and faculty had contrasting perceptions of the department head's level of authoritarianism when he or she was chosen via Method 2. These findings suggested that selection Method 2 had problems associated with it with regard to consideration and authoritarianism. One perplexing observation was that faculty saw Method 2 heads as being less considerate, but they also saw them as being less authoritarian than deans saw them as being. A possible explanation to this phenomenon might be that faculty in Doctorate-Granting Universities engaged in research in which they were pretty much on their own, except for research funds which could be allocated by dean or department head without much consideration to faculty feelings.
7. A comparison of Method 2 with Method 3 showed that Method 3 had fewer incongruities associated with it (as determined by responses of deans, faculty, as well as department heads themselves). On the basis of this comparison one might be tempted to conclude that Method 3 was better
than Method 2. Such a conclusion, though, should be disturbing to the administrator (dean or president) since it claims that the job of selecting a department head in Doctorate-Granting Universities should be left entirely in the hands of faculty members from the standpoint of consideration and authoritarianism of department heads.

## Recommendations

The following recommendations are made based on the findings of this study:

1. Faculty members in Doctorate-Granting Universities should be given an upper hand in the selection of their academic department heads if congruence of leadership behavior and expectations is to be achieved.
2. Research studies related to the selection of department heads should be conducted for other categories of universities (e.g., Research Universities, Comprehensive Universities) using all four categories of selection. The results of this study should not be used as a rationale for the elemination of two selection categories as other types of institutions of higher education employ different combinations of selection methods.
3. A larger sample size in future research efforts would serve to give more creditibility to the findings. This would mean that additional academic departments should be inlcuded in future studies; more institutions, and additional faculty members from each department should be surveyed. This might encourage the selection methods used less frequently to receive research attention.
4. There has been much written about the role conflict experienced by department heads. The author of this thesis hoped that selection methods would reveal some of the underlying causes of that role conflict. Other than the interplay between Consideration, Authoritarianism, and Method (selected by dean in consultation with faculty) discussed above, role conflict was not suggested. It is therefore recommended that future studies try to establish more precisely the relationship, if any, between method of selection and role conflict of academic department heads.

## ENDNOTES

${ }^{1}$ James Brann and Thomas Emmet, eds. The Academic Department or Division Chairman: A Complex Role (Detroit: Balamp, 1972), pp. 18-19.
${ }^{2}$ Nathaniel Stewart, "A Realistic Look at Organizational Loyalty," The Management Review, L (January, 1961), pp. 22-24.
$3_{\text {Wayne K. Hoy and Cecil G. Miskel, Educational Administration: }}$ Theory, Research, and Practice (New York: Random House, 1978), p. 72.
${ }^{4}$ Milton Harry Dennison, "The Selection of a School Principal: A Competency Based Approach," Dissertation Abstracts International, Vol. 42, No. 4A(October, 1981), p. 1395.

## SELECTED BIBLIOGRAPHY

American Council on Education. President's Letter. Washington, June, 1980.

Andersen, Kay J. "The Ambivalent Department." Educational Record, Vol. XLIX (Spring, 1968), pp. 206-213.

Arnett, Mathew D. "Sex and the Least Preferred Co-worker Score Effects in Leadership Behavior." Sex Roles: A Journal of Research, Vol. 6, No. 1 (February, 1980), pp. 139-52.

Baldridge, J. Victor, Ed. Academic Governance. Berkeley: McCutchan, 1971.

Bartz, Albert E. Basic Statistical Concepts in Education and Behavioral Sciences. Minnesota: Burgess Publishing Co., 1976.

Benezet, Louis T. "Uses and Abuses of Departments." In Academic Departments, Dean E. McHenry et al., Eds. San Francisco: Jossey-Bass, 1977.

Blau, Peter and Scott, Richard. Formal Organizations. San Francisco: Chandler Publishing Co., 1962.

Brann, James and Emmet, Thomas A., Eds. The Academic Department or Division Chairman: A Complex Role. Detroit: Balamp, 1972.

Brown, J. Douglas. "Departmental and University Leadership." In Academic Departments, Dean E. McHenry et al., Eds. San Francisco: Jossey-Bass, 1977.

Carnegie Council on Policy Studies on Higher Education. A Classification of Institutions of Higher Education. Berkeley, California, 1976.

Corson, John J. Governance of Colleges and Universities. New York: McGraw-Hi11, 1960.

Dennison, Milton Harry. "The Selection of a School Principal: A Competency Based Approach." Dissertation Abstracts International, Vol. 42, No. 4A (October, 1981), p. 1395.

Dilley, Frank B. "The Department Chairman or Academic Planner." In The Academic Department or Division Chairman: A Complex Role, James Brann and Thomas A. Emmet, Eds. Detroit: Balamp, 1972.

Dressel, Paul L. et al. The Confidence Crisis: An Analysis of University Departments. San Francisco: Jossey-Bass, 1971.

Ehrle, Elwood B. "Selection and Evaluation of Department Chairmen." Educational Record, Vol. LVI (Winter, 1975), pp. 29-38.

Fiedler, Fred E. A Theory of Leadership Effectiveness. New York: McGraw-Hill, 1967.

Gross, Neal et al. Exploration in Role Analysis: Studies of the School Superintendency Role. New York: Wiley, 1957.

Halpin, Andrew W. Theory and Research in Administration. New York: Macmillan, 1966.

Harrington, Fred H. "Shortcomings of Conventional Departments." In Academic Departments, Dean E. McHenry et al., Eds. San Francisco: Jossey-Bass, 1977.

Hebert, Forrest T. "Factors Affecting Individual Loyalty to an Organization: The Legislative Organization." (Unpub. Ph.D. Dissertation, The University of Iowa, 1971.)

Heimler, Charles H. "The College Department Chairman." In The Academic Department or Division Chairman: A Complex Role, James Brann and Thomas A. Emmet, Eds. Detroit: Balamp, 1972.

Hoppock, Robert. Job Satisfaction. New York: Harper, 1935.
Hoy, Wayne K. and Miskel, Cecil G. Educational Administration: Theory, Research, and Practice. New York: Random House, 1978.

Hoy, Wayne K. and Williams, Leonard B. "Loyalty to Immediate Superior at Alternate Levels in Public Schools." Educational Quarterly, Vol. VII (Spring, 1971), p. 8.

Hoyt, Donald P. and Spangler, Ronald K. "Administrative Effectiveness of the Academic Department Head: I. The Measurement of Effectiveness." (Kansas State University Research Report No. 42, July, 1977.) Microfiche, ED 171214.

Hoyt, Donald P. and Spangler, Ronald K. "Administrative Effectiveness of the Academic Department Head: II. Correlates of Effectiveness." (Kansas State University Research Report, No. 47, June, 1978.) Microfiche, ED 171215.

Leslie, David W. "The Status of the Department Chairmanship in University Organization." AAUP Bulletin, Vol. LIX (December, 1973), pp. 419-426.

Levine, Arthur. Handbook on Undergraduate Curriculum. San Francisco: Jossey-Bass, 1978.

McHenry, Dean E. et al. Academic Departments. San Francisco: JosseyBass, 1977.

Morse, John J. and Lorsch, Jay W. "Beyond Theory Y." Harvard Business Review (May-June, 1970), pp. 61-68.

Murray, Robert K. "On Departmental Development: A Theory." The Journal of General Education, Vol. XVI (October, 1964), pp. 227236.

Murray, V.V. and Corenblum, Allan. "Loyalty to Immediate Superior at Alternate Hierarchical Levels in a Bureaucracy." The American Journal of Sociology, Vol. LXII (July, 1966), pp. 77-85.

Napier, Rodney W. and Gershenfeld, Matti K. Groups: Theory and Practice. 2nd Ed. Boston: Houghton Mifflin Co., 1981.

Nie, Norman H. et al. Statistical Package for the Social Sciences. 2nd Ed. New York: McGraw-HilT, 1975.

Osborne, Jacalyn R. "A Description of Principalship Selection Porcesses in Selected Ohio Appalachian School Districts." Dissertation Abstracts International, Vol. 42, No. 6A (December, 1981), p. 2614.

Rees, Richard T. and Hoy, Wayne K. "The Principal and Teacher Loyalty." Research Bulletin, New Jersey School Development Council, Rutgers Graduate School of Education, Vol. XVI (Fall, 1971), pp. 4-8.

Reisman, D. Constraints and Variety in American Education. New York: Doubleday Anchor Books, 1958.

Roach, James H.L. "The Academic Department Chairperson: Functions and Responsibilities." Educational Record, Vol. LVII (Winter, 1976), pp. 13-23.

Rudolph, Frederick. The American College and University: A History. New York: Vintage Books, 1962.

Scott, Robert A. "The Department Chairperson: Role, Function, and Future." (Paper presented at the National League for Nursing Conference, New York, November 20, 1980.) Microfiche, ED 196352.

Smith, Patricia C. et al. The Measurement of Satisfaction in Work and Retirement. Chicago: Rand McNally, 1969.

Straver, Will E. "Study of Attitudes Toward Organizational Loyalty." Dissertation Abstracts International, Vol. 32, No. 10A (April, 1962), p. 5419.

Szilagyi, Andrew D. Management and Performance. Santa Monica, CA: Goodyear Publishing Co., 1981.

Theodory, George C. "The Effect of the Least Preferred Co-worker Measure on School Outcomes in Lebanon's Educational System." Journalof Psychology, Vol. 108, No. 1 (May, 1981), pp. 3-6.

Todd, Robert Patton. "Leadership Styles and Characteristics of Oklahoma State-Supported Two-Year College Division/Department Chairpersons." (Unpub. Ph.D. dissertation, Oklahoma State University, 1977.)

Toulyati, Monsour. "The Leadership Behavior of the Academic Department Chairman: Expectation and Perceptions of Deans, Chairmen, Faculty Members, and Students at Selected Institutions of Higher Learning." (Unpub. Ph.D. dissertation, Oklahoma State University, 1981.)

Verbeke, Maurice G. "The Junior College Academic Dean's Leadership Behavior as Viewed by Superiors and Faculty." (Unpub. Ph.D. disseration, Pennsylvania State University, 1966).

Vroom, Victor. Work and Motivation. New York: Wiley, 1964.
Weber, Max and Parsons, Talcott. The Theory of Social and Economic Organization. Trs. A.M. Henderson and Talcott Parsons. New York: Free Press, 1947.

Zucker, Jacob D. "The Department Head: A Study of an Authoritarian Leadership Model in American Higher Education." (Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Chicago, Illinois, March 19, 1978.)

APPENDIX A

FIFTY-SIX ITEM SURVEY QUESTIONNAIRE SENT TO PARTICIPATING FACULTY MEMBERS

QUESTIONNAIRE

## Section I

Please read each item carefully and consider how frequently your academic department head actually engages in the behavior described by that item: "always", "often", "occasionally", "seldom", or "never. Circle the number that would most closely correspond to your assessment.

Name of Academic department $\qquad$

1. Maintaining definite standards of performance
2. Encouraging the use of uniform procedures

Treating all group members as his/her equals
Making group members feel at ease when talking with them
Letting group members know what is expected of them
6. Looking out for the personal welfare of individual group members
7. Seeing to it that group members are working up to capacity
8. Speaking in a manner not to be questioned
9. Ruling with an iron hand
10. Making his/her attitudes clear to the group
11. Doing little things to make it pleasant to be a member of the group
12. Doing personal favors for members of the group
13. Being willing to make changes
14. Being friendly and approachable
15. Refusing to explain his/her actions
16. Putting suggestions by the group members into operation
17. Finding time to listen to group members
18. Seeing to it that, the work of group members is coordinated
19. Assigning group members to particular tasks
20. Criticizing poor work
21. Making sure that his/her part in the organization is understood by all members
22. Working without a plan
23. Being easy to understand
24. Keeping to him-/herself
25. Acting without consulting the group
26. Getting group approval on important matters before going ahead
27. Trying out his/her new ideas with the group

43210
28. Emphasizing the meeting of deadlines

43210
29. Being slow to accept new ideas

43210
30. Asking that group members follow standard rules and regulations

43210
31. Getting group input on important issues

43210
32. Responding to a group clique

43210
33. Making allowance for group members' problems

43210
34. Stressing group accomplishments
35. Welcoming member suggestions about the group

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43210
36. Explaining his/her decisions
37. Stressing group members' morale
38. Acknowledgiñg good work
39. More a reactor than an initiator
40. Postponing decisions unnecessarily

43210
41. Being strict as opposed to being lenient

43210
42. Supervising closely rather than letting subordinates work on their own
43. Approaching subordinates in a manner nonindicative of professional

43210 orientation
44. Has an authoritarian approach

43210
45. Being friendly in his/her relationship with subordinates
46. When things don't go smoothly, he/she loses his/her temper or gets 43210 excited

## Section II

Check the one answer in each group which best describes your feeling about the situation described.
47. If you had the chance to teach for the same pay in another department under the direction of another department head, how would you feel about moving?
$\qquad$ a. I would very much prefer to move
$\qquad$ b. I would slightly prefer to move
$\qquad$ c. It would make no difference to me
$\qquad$ d. I would slightly prefer to remain where I am
$\qquad$ e. I would very much prefer to remain where I am
48. About how often does your department head assume responsibility for the mistakes in your department?
$\qquad$ a. Very often
$\qquad$ b. Quite often
$\qquad$ c. Occasionally
$\qquad$ d. Very rarely
$\qquad$ e. Never
49. Generally speaking, how much confidence and trust do you have in your department head?
$\qquad$ a. Almost none
$\qquad$ b. Not much
$\qquad$ c. Some
$\qquad$ d. Quite a lot
$\qquad$ e. Complete
50. Department heads sometimes must make decisions which seem to be against the current interests of their subordinates. When this happens to you as a faculty member, how much trust do you have that your department head's decision is in your interest in the long run?
$\qquad$ a. Complete trust
$\qquad$ b. A considerable amount of trust
$\qquad$ c. Some trust
$\qquad$ d. Only a little trust
$\qquad$ e. No trust at all
51. If your department head transferred and only you and you alone among the staff were given a chance to go with him (doing the same work for the same pay) how would you feel about making the move?
$\qquad$ a. I would very much feel like making the move
$\qquad$ b. I would feel a little like making the move
$\qquad$ c. I would not care one way or the other
$\qquad$ d. I would feel a little like not moving with him/her
_ e. I would feel very much like not moving with him/her•
52. Is your department head the kind of person you really like working for?
_ a. Yes, he/she is really that kind of person
$\qquad$ b. Yes, he/she is in many ways
$\qquad$ c. $\mathrm{He} /$ she is in some ways
$\qquad$ d. No, he/she is not in many ways
$\qquad$ e. No, he/she really is not
53. All in all how satisfied are you with your department head?
$\qquad$ a. Very dissatisfied with my department head?
$\qquad$ b. A little dissatisfied
$\qquad$ c. Satisfied
$\qquad$ d. Quite satisfied
$\qquad$ e. Very satisfied with my department head
54. How much loyalty do you feel toward your department head?
$\qquad$ a. Almost none at all
$\qquad$ b. A little
$\qquad$ c. Some
$\qquad$ d. Quite a bit
$\qquad$ e. A very great deal
55. How much loyalty do you feel toward your department?
$\qquad$ a. Almost none at all
$\qquad$ b. A little
$\qquad$ c. Some
$\qquad$ d. Quite a bit
$\qquad$ e. A very great deal
56. My department head provides effective leadership
__ almost always
___ b. Most of the time
_c. Some of the time
_ d. Seldom
_ e. Almost never

Thank you for completing this questionnaire.

## APPENDIX B

FORTY-SEVEN ITEM SURVEY QUESTIONNAIRE SENT TO PARTICIPATING ACADEMIC DEPARTMENT HEADS

## Section I

Please read each item carefully and consider how frequently you as academic department head actually engage in the behavior described by that item: "always", "often", "occasionally", "seldom", or "never". Circle the number that would most closely correspond to your assessment.

Name of Academic department $\qquad$

1. Maintaining definite standards of performance
2. Encouraging the use of uniform procedure
3. Treating all group members as his/her equal
4. Making group members feel at ease when talking with them
5. Letting group members know what is expected of them
6. Looking out for the personal welfare of individual group members
7. Seeing to it thet group members are working up to capacity
8. Speaking in a manner not to be questioned
9. Ruling with an iron hand
10. Making his/her attitudes clear to the group
11. Doing little things to make it pleasant to be a member of the group
12. Doing personal favors for members of the group
13. Being willing to make changes
14. Being friendly and approachable
15. Refusing to explain his/her actions
16. Putting suggestions by the group members into operation
17. Finding time to listen to group members
18. Seeing to it that the work of group members is coordinated
19. Assigning group members to particular tasks
20. Criticizing poor work
21. Making sure that his/her part in the organization is understood by all members
22. Working without a plan

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23. Being easy to understand

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24. Keeping to him-/herself
25. Acting without consulting the group
26. Getting group approval on important matters before going ahead
27. Trying out his/her new ideas with the group

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28. Emphasizing the meeting of deadlines

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29. Being slow to accept new ideas

43210
30. Asking that group members follow standard rules and regulations
31. Getting group input on important issues

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32. Responding to a group clique

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33. Making allowance for group members' problems

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34. Stressing group accomplishments
35. Welcoming member suggestions about the group
36. Explaining his/her decisions
37. Stressing group members' morale
38. Acknowledging good work

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43210
39. More a reactor than an initiator

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40. Postponing decisions unnecessarily
41. Being strict as opposed to being lenient
42. Supervising closely rather than letting subordinates work on their own
43. Approaching subordinates in a manner non-indicative of professional orientation
44. Has an authoritarian approach
45. Being friendly in his/her relationship with subordinates
46. When things don't go smoothly, he/she loses his/her temper or gets excited

## Section II

Check the one answer which best describes your feeling about the situation described:
47. How much loyalty do you feel toward your academic department

```
                a. Almost none at all
_ b. A little
_ c. Some
__ d. Quite a bit
_ e. A very great deal
```

Thank you for completing this questionnaire.

## APPENDIX C

FORTY-SEVEN-ITEM SURVEY QUESTIONNAIRE SENT
TO PARTICIPATING DEANS

## QUESTIONNAIRE

## Section I

Please read each item carefully and consider how frequently on the basis of your experience your academic department head actually engages in the behavior described by that item: "always", "often", "occasionaliy", "seldom", r "never". Circle the number that would most closely correspond to your assessment.

Name of your Academic department $\qquad$

1. Maintaining definite standards of performance
2. Encouraging the use of uniform procedures
3. Treating all group members as his/her equal
4. Making group members feel at ease when talking with them
5. Letting group members know what is expected of them
6. Looking out for the personal welfare of individual group members

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25. Acting without consulting the group
26. Getting group approval on important matters before going ahead
27. Trying out his/her new ideas with the group
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28. Emphasizing the meeting of deadlines
29. Being slow to accept new ideas
30. Asking that group members follow standard rules and regulations
31. Getting group input on important issues
32. Responding to a group clique
33. Making allowance for group members' problems
34. Stressing group accomplishments
35. Welcoming member suggestions about the group
36. Explaining his/her decisions

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37. Stressing group members' morale
38. Acknowledging good work

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39. More a reactor than a initiator
40. Postponing decisions unnecessarily
41. Being strict as opposed to being lenient
42. Supervising closely rather than letting subordinates work on their own
43. Approaching subordinates in a manner non-indicative of professional orientation
44. Has an authoritarian approach
45. Being friendly in his/her relationship with subordinates
46. When things don't go smoothly, he/she loses his/her temper or gets excited

Section II
Check the one answer which best describes your feeling about the situation described:
47. My department héad provides effective leardership
___ a. Almost always
___ b. Most of the time
_ c. Some of the time
d. Seldom
$\qquad$ e. Almost never

Thank you for completing this questionnaire.

## APPENDIX D

THIRTY-ITEM LBDO REAL AS WORDED FOR THIS STUDY

## LEADERSHIP BEHAVIOR DESCRIPTION QUESTIONNAIRE

Please read each item carefully and consider how frequently your academic department head actually engages in the behavior described by that item: "always," "often," "occasionally,"" "seldom," or. "never." Circle the number that would most closely correspond to your assessment.

## A. Initiating Structure



1. Maintaining definite standards of performance

43210
2. Encouraging the use of uniform procedures

43210
3. Letting group members know what is expected of them

43210
4. Seeing to it that group members are working up to capacity
5. Speaking in a manner not to be questioned

43210
6. Ruling with an iron hand :

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43210
7. Doing personal favors for members of the group . 43210
8. Seeing to it that the work of group members is coordinated
9. Assigning group members to particular tasks
10. Criticizing poor work

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11. Making sure that his/her part in the organization is

4310 understood by all members
(12.)Working without a plan

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13. Trying out his/her new ideas with the group
14. Emphasizing the meeting of deadlines

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15. Asking that group members follow standard rules and 43210
43210 regulations
B. Consideration
16. Treating all group members as his or her equals

43210
Note: Items in () are negativelly worded
17. Making group members feel at ease when talking with them

43210
18. Looking out for personal welfare of individual group 43210 members
19. Making his/her attitudes clear to the group

43210
20. Doing little things to make it pleasant to be a member or the group
21. Being willing to make changes

43210
22. Being friendly and approachable

43210
(23.) Refusing to explain his/her actions

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24. Putting suggestions by group members into operation
25. Finding time to listen to group members


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43210
27. Being easy to understand
(28.) Acting without consulting the group

43210
29. Getting group approval on important matters before going ahead

43210
(30.) Being slow to accept new ideas

43210

Note: Items in ( ) are negatively scored

## APPENDIX E

THIRTY-ITEM LBDQ MODIFIED AS
WORDED FOR THIS STUDY

Please read each item carefully and consider how frequently your academic department head actually engaged in the behavior described by that item: "always," "often," "occasionally," "seldom," or "never." Circle the number that would most closely correspond to your assessment.

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Makes own attitudes clear | 4 | 3 | 2 | 10 |
| 2. | Tries out new ideas with faculty | 4 | 3 | 2 | 10 |
| (3.) | Works without a plan | 4 | 3 | 2 | 10 |
| 4. | Maintains standards of performance | 4 | 3 | 2 | 10 |
| 5. | Makes his or her role understood by all | 4 | 3 | 2 | 10 |
| 6. | Lets faculty know what's expected of them | 4 | 3 | 2 | 10 |
| 7. | Sees that faculty work to capacity | 4 | 3 | 2 | 10 |
| 8. | Sees that faculty work is coordinated | 4 | 3 | 2 | 1 |
| 9. | Does little things to - please faculty | 4 | 3 | 2 | 10 |
| 10. | Is easy to understand. | 4 | 3 | 2 | 10 |
| (11.) | Keeps to him or herself | 4 | 3 | 2 | 10 |
| 12. | Looks out for personat welfare of faculty | 4 | 3 | 2 | 10 |
| (13.) | Refuses to explain his or her actions | 4 | 3 | 2 | 10 |
| (14.) | Acts without consulting faculty | 4 | 3 | 2 | 10 |
| (15.) | Slow to accept new ideas | 4 | 3 |  | 10 |
| 16. | Treats all faculty as equals | , | 3 | 2 | 10 |
| 17. | Is willing to make changes | 4 | 3 | 2 | 10 |
| 18. | Puts faculty at ease when talking with them | 4 | 3 | 2 | 10 |
| 19. | Puts faculty suggestions into action | 4 | 3 | 2 | 10 |
| 20. | Gets faculty approval on important matters | 4 | 3 | 2 | 10 |
| (21.) | Postpones decisions unnecessarily | , | 3 |  | 10 |
| (22.) | More a reactor than an initiator | 4 | 3 | 2 | 10 |
| 23. | Welcomes faculty suggestions about the department | 4 | 3 | 2 | 10 |
| (24.) | Responds to faculty clique | 4 | 3 | 2 | 10 |
| 25. | Makes allowance for faculty problems | 4 | 3 | 2 | 10 |
| 26. | Acknowledges good work | 4 | 3 | 2 | 10 |
| 27. | Explains his or her decisions | 4 | 3 |  | 10 |
| 28. | Gains faculty input on important matters | 4 | 3 | 2 | 10 |
| 29. | Stresses department's accomplishments | 4 | 3 | 2 | 10 |
| 30. | Stresses faculty morale | 4 | 3 | 2 | 10 |

NOTE: Items in ( ) are negatively worded.

APPENDIX F

EARLIER-RESULTS OBTAINED USING THE LBDQ MODIFIED

$$
\begin{aligned}
& \text { Relationships of Fidctor Scores to Perfomance Ratings } \\
& \text { for } 15 \text {. Adininistrative Functions } \\
& (N=103 \text { Departriants })
\end{aligned}
$$



Note: All results shown are siqnificant at the .05 level of probability.

APPENDIX G

EIGHT-ITEM AUTHORITARIAN INSTRUMENT
AS WORDED FOR THIS STUDY

## AUTHORITARIANISM

Please read each item carefully and consider how frequently your academic department head actually engages in the behavior described by that item: "always," "often," "occasionally," "seldom," or "never." Circle the number that would most closely correspond to your asses sment.


1. Speaking in a manner not to be questioned 43210
2. Ruling with an iron hand $\begin{array}{llll}4 & 3 & 2 & 1\end{array}$
3. Refusing to explain his/her actions

43210
4. Being strict as opposed: to being lenient
5. Supervising closely rather than let subordinates work on their own

43210

43210
6. Approaching subordinates in a manner nonindicative of professional orientation

43210
7. Has an authoritarian approach

43210
(8.) Being friendly in his/her relationship with subordinates

43210

NOTE: Item in ( ) is negatively scored.

APPENDIX H

## EIGHT-ITEM LOYALTY TO IMMEDIATE SUPERVISOR INSTRUMENTT AS WORDED FOR THIS STURY

## LOYALTY TO IMMEDIATE SUPERVISOR

Check the one answer in each group which best describes your feeling about the situation described.

1. If you had the chance to teach for the same pay in another department under the direction of another department head, how would you feel about moving?
___ a. I would very much prefer to move
__ b. I would slightly prefer to move
___ c. It would make no difference to me
_ d. I would șlightly prefer to remain where I am
$\qquad$ e. I would very much prefer to remain where I am
2. About how often does your department head assume responsibility for the mistakes in your department?
a. Very often
$\qquad$ b. Quite often
$\qquad$ c. Occasionally
$\qquad$ d. Very rarely
$\qquad$ e. Never
3. Generally speaking, how much confidence and trust do you have in your department head?
$\qquad$ a. Almost none
b. Not much
$\qquad$ c. Some
$\qquad$ d. Quite a lot
_ e. Complete

## LOYALTY TO IMMEDIATE SUPERVISOR

Check the one answer in each group which best describes your feeling about the situation described.

1. If you had the chance to teach for the same pay in another department under the direction of another department head, how would you feel about moving?
$\qquad$ a. I would very much prefer to move
$\qquad$ b. I would slightly prefer to move
$\qquad$ c. It would make no difference to me
__ d. I would ṣlightly prefer to remain where I am
$\qquad$ e. I would very much prefer to remain where I am
2. About how often does your department head assume responsibility for the mistakes in your department?
$\qquad$ a. Very often
$\qquad$ b. Quite often
$\qquad$ c. Occasionally
$\qquad$ d. Very rarely
$\qquad$ e. Never
3. Generally speaking, how much confidence and trust do you have in your department head?
$\qquad$ a. Almost none
$\qquad$ b. Not much
$\qquad$ c. Some
$\qquad$ d. Quite a lot
$\qquad$ e. Complete
4. Department heads sometimes must make decisions which seem to be against the current interests of their subordinates. When this happens to you as a faculty member, how much trust do you have that your department head's decision is in your interest in the long run?
___ a. Complete trust
b. A considerable amount of trust
$\qquad$ c. Some trust
$\qquad$ d. Only a little trust
$\qquad$ e. No trust at all
5. If your department head transferred and only you and you alone among the staff were given a chance to go with him (doing the same work for the same pay) how would you feel about making the move?
a. I would very much feel like making the move
b. I would feel a little like making the move
C. I would not care one way or the other
d. I would feel a little like not moving with him/her
e. I would feel very much like not moving with him/her
6. Is your department head the kind of person you really like working for?
$\qquad$ a. Yes, he/she is really that kind of person.
$\qquad$ b. Yes, he/she : $\mathcal{S}$ in many ways.
$\qquad$ c. He/she is in some ways.
$\qquad$ d. No, he/she is not in many ways.
_ e. No, he/she really is not.
7. All in all how satisfied are you with your department head?
a. Very dissatisfied with my department head
b. A little dissatisfied
c. Fairly dissatisfied
d. Quite satisfied
e. Very satisfied with my department head
8. Department heads sometimes must make decisions which seem to be against the current interests of their subordinates. When this happens to you as a faculty member, how much trust do you have that your department head's decision is in your interest in the long run?
$\qquad$ a. Complete trust
$\qquad$ b. A considerable amount of trust
$\qquad$ c. Some trust
$\qquad$ d. Only a little trust
$\qquad$ e. No trust at all
9. If your department head transferred and only you and you alone among the staff were given a chance to go with him (doing the same work for the same pay) how would you feel about making the move?
_a. I would very much feel like making the move
b. I would feel a little like making the move
C. I would not care one way or the other
$\qquad$ d. I would feel a little like not moving with him/her
$\qquad$ e. I would feel very much like not moving with him/her
10. Is your department head the kind of person you really like working for?
a. Yes, he/she is really that kind of person.
b. Yes, he/she is in many ways.
c. He/she is in some ways.
d. No, he/she is not in many ways.
e. No, he/she really is not.
11. All in all how satisfied are you with your department head?
$\qquad$ a. Very dissatisfied with my department head
__ b. A little dissatisfied
$\qquad$ c. Fairly dissatisfied
$\qquad$ d. Quite satisfied
$\qquad$ e. Very satisfied with my department head
12. How much loyalty do you feel toward your department head?
___ almost none at all
_ b. A little
_C. Some
__ d. Quite a bit
_e. A very great deal
13. How much loyalty do you feel toward your department head?
__a. Almost none at all
b. A little
_C. Some
d. Quite a bit
___ A very great deal

## APPENDIX I

ONE-ITEM-LOYALTY TO ORGANIZATION
AS WORDED FOR THIS STUDY

## LOYALTY TO ACADEMIC DEPARTMENT

Please check the one answer which best describes your feeling about the situation described.

How much loyalty do you feel toward your department?
$\qquad$ a. Almost none at all
_ b. A little
$\qquad$ c. Some
___ Quite a bit
_ e. A very great deal

APPENDIX J

ONE-ITEM LEADER EFFECTIVENESS
AS WORDED FOR THIS STUDY

## LEADER EFFECTIVENESS

Please check the one answer which best describes your feeling about the situation described.

My department head provides effective leadership
___a. Almost always
b. Most of the time
c. Some of the time
d. Seldom
e. Almost never

APPENDIX K

ONE-ITEM EMOTIONAL DETACHMENT
AS WORDED FOR THIS STUDY

## EMOTIONAL DETACHMENT

Please read the item carefully and consider how frequently the academic department head actually engages in the behavior described by the item: "always", "often", "occasionally", "seldom", or "never". Circle the number that most closely corresponds to your answer.

When things don't go smoothly, he/she loses his/her temper or gets excited.

APPENDIX L
-CORRESPONDENCE


# Oklahoma State University 

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Sincerely,

Hat'ew R. Humbwa
Doctoral candidate

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# Oklahoma State University <br> <br> OEPARTMENT OF EDUCATIONAL AOMINISTRATION <br> <br> OEPARTMENT OF EDUCATIONAL AOMINISTRATION AND HICHER EDUCATION 

 1 STILLWATER, OKLAHOMA INO:8 309 CUNDERSEN HALL (405) 624-7244May 21, 1982

Office of Educational Resources

- Kansas State University

Mannattan, KS 66506
Dear Sir or Madam:
I an interested in receiving permission to use the 30 -item LEDO-l:Modified, which was used by Denald P. Hoyt and Ronald K. Spangler in "Administrative Effectiveness of tine Academic Department Head: II. Correlates of Effectiveness", Kansas State University Research Report \#47, June 1978.

I hope to use the 30 items as part of a 56 -item questionnaire which I intend to administer to a sample of 300 deans, academic department heads, and faculty in selected doctorate-granting universities as part of my doctoral dissertation. I would appreciate your prompt attention. Tiank you for your help.

> Sincerely,

Hat'new R. ilumbwa Doctoral candidate

IRRI: j fb


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Sincerely,


Mat new R. ilumbwa
Doctoral candidate
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Tr. Mamba -



# Oklahoma State University <br> DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND HIGHER EDUCATION 

May 21, 1982

American Journal of Sociology
University of Chicago Press
5801 S. Ellis Avenue
C'nicago, IL 60637
Dear Sir or Madam:
I am interested in receiving permission to use the $\delta$-item
Loyalty instrument, which was developed by V. V. Aluray and Allan Corenblum in "Loyalty to Immediate Superior at Alternate Hierarchical Levels in a Bureaucracy", published in your journal, Vol. LXII, July 1966, pp. 77-85. The instrument was later adapted by Wayne K. Hoy and Leonard B. Wilfiams in "Loyalty to Imnediate Superior at Alternate Levels in Public Schools", in 1971.

I hope to use the 8 items as part of a 56-item questionnaire which I intend to administer to a sample of 300 deans, academic department heads, and faculty in selected doctorate-granting universities as part of my doctoral dissertation. I would appreciate your prompt attention. Thank you for your help.

Sincerely,

Mathew R. Mumbwa
Doctoral candidate

MRI: j fb


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| :--- | :--- |
| Dear Requester: | Date: 27 May 1982 |

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Sincerely yours,
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Muray and Corenblum, AJS (1966): 77-85.
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## Mathew R. Mumbwa

401 Math Science Building
Mathematical Department
Oklahoma State University
Stillwater, Oklahoma 74078
21 May 1982

Prof. Wayne K. Hoy
Department of Educational
Administration \& Higher Education
Rutgers University
30 College Avenue
New Brunswick, New Jersey 08903

Dear Sir:

In the study you conducted for the U.S. Department of Health, Education and Welfare (Proj. No. 2B090; Grant No. 056-2-2-2B090) you used, among other instruments, two single item instruments:

1. Loyalty to the school
2. Principal Effectiveness

Could you please give me permission to use these two items.
I plan to use these two items on part of a 56-item questionnaire which I intend to administer to a sample of less than 300 consisting of deans, academic department heads, and faculty in selected doctorate granting universities. The purpose of the study is my doctoral dissertation.

I would appreciate your prompt consideration regarding this matter.
Thank you for your help.


GRADUATE SCHOOL OF EDUCATION. OFFICE OF THE ASSOCIATE DEAN NEW BRUNSWICK•NEW JERSEY 08903• 201/932.7626

Mr. Mathew R. Mumbwa
Oklahoma State University
Department of Educational
Administration and Higher
Education
Stillwater, OK 74078

Dear Mr. Mumbwa:

You have my permission to use any of my research instruments described in the study conducted for the U.S. Department of Health, Education, and Welfare (Project No. 2B090; Grant No. OEG-2-2-2B090).

Best wishes in your research.


Professor and
Associate Dean

WKH: 1 mk


Dear Dean:
Many peopie believe that better selection methocis could eniance the quality of future administrators. For my doctoral dissertation, I am conducting a study on the process of selecting academic department heads for American institutions of higher learning. Your institution was selected for my study through a random drawing. Please coriplete the enclosed questionnaires for each of your department heads tilat are identified on the enclosed personal information sheet. Eacil questionnaire may take $5-10$ minutes to complete.

All data will be treated confidentially; neither your identity nor that of your college will appear in the reported findings.

If you desire, I would be happy to send you an abstract of riy findings. Please check the appropriate box on the persunal information sheet if interested.

I appreciate your prompt attention regarding the enclosed materials. Thank you in advance for your cooperation.

Sincerely,


Enclosures
Projected supArised by:
Tr. Wacob E. Zucter
Major advisgr off the doctoral dissertation

Dr. Thorias A. Karman
Chairman of the doctoral cormittee


## Oklahoma State University <br> STILLWATER, OKLAHOMA $7+078$ 309 CUNDERSEN HALL (405) 624.7244 <br> DEPARTMENT OF EDUCATIONAL ADMINISTRATION

 AND HIGHER EDUCATIONJuly 14, 1982

Dear Dean:
For my doctoral dissertation, I am conducting a study on the selection of department heads. Last week I sent you a questionnaire. Your busy schedule may have prevented you from responding or you may never have received the letter and/or questionnaire at all. I am sending another copy of the questionnaire together with a self-addressed envelope.

Thank you for your help in completing the questionnaire.


Mathew R. Mumbwa
P.S. Please ignore this reminder if you have already completed the questionnaire. Thank you again.


# Oklahoma State University 

 AND HIGHER EDUCATION

Dear Department Head:
Many people believe that better selection methods could enhance the quality of future administrators. For my doctoral dissertation, I am conducting a study on the process of selecting academic department heads for American institutions of higher learning. Your insticution was selected for my study through a random drawing. Please find enclosed three questionnaires, one for you and the other two for two members of your faculty. I will appreciate it if you take $5-10$ minutes to fill out the 47-item questionnaire. Please give the other two questionnaires to two members of your faculty selected using the following procedure. Using the most recent alphabetical list of your departmental faculty, please select the first and last names. In case of a selection problem, the first name may be replaced by the second while the last may be replaced- by the one above it.

All data will be treated confidentially; neither your name nor that of your academic unit will appear in the reported findings.

If you desire, I will be happy to send you an abstract of my . findings. Please check the appropriate box on the personal information sheet if interested.

I appreciate your prompt attention regarding tine enclosed material. Thank you in advance for your cooperation.



July 14, 1982

Dear Department Head:
For my doctoral dissertation, I am conducting a study on the selection of department heads. Last week I sent you three questionnaires, one for you and the other two for two mermbers of your faculty. Your busy schedules may have prevented you and your two faculty members from responding or you may never have received the letter and/or questionnsires at all. I am sending other copies of the questionnaires together with self-addressed envelopes.

Thank you for your help in completing the questionnaires.


Mathew R. Mumbwa
P.S. Please ignore this reminder if you have already completed the questionnaire. Thank you again.


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Dear Professor:
    Many peonle believe that better selection methods could enhance
    the quality of future administrators. For my doctoral dissertation, I
    am conducting a study on the process of selecting academic department
    heads for American institutions of higher learning. Your institution
    was selected for my study through a random drawing. Would you there-
    fore help me by filling the attached short questionnaire and personal
    information sheet. This action may take 5-10 minutes of your time.
    All data will be treated confidentially; neither your name nor that of
    your academic unit will appear in the reported findings.
    If you desire, I would be happy to send you an abstract of my
    findings. Please check the appropriate box on the personal information
    sheet if interested.
I appreciate your prompt attention regarding the enclosed material. Thank you in advance for your cooperation.
Sincerely,
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Doctoral candidate
Enclosures
projected 汉 \(^{2}\) erwised by:
Dr lazcob D Lugker
hajor advisor of the doctoral dissertation
Dr. Thomas A. Karman
Chairman of doctoral committee
```



# Oklahoma State University 

DEPARTMENT OF EDUCATIONAL AONUNISTRATION
AND HIGHER EDUC.ATION

Dear
For my doctoral dissertation, I am conducting a study on the selection of department heads. Last week I sent you a questionnaire. Your busy schedule may have prevented you from responding or you may never have received the letter and/or questionnaire at all. I am sending another copy of the questionnaire together with a self-addressed envelope.

Thank you for your help in completing the questionnaire. Sincerely,


Mathew R. Mumbwa
P.S. Please ignore this reminder if you have already completed the questionnaire. Thank you again.

## APPENDIX M

AUTOBIOGRAPHICAL FORM SENT TO
PARTICIPATING DEANS

PERSONAL INFORMATION SHEET FOR DEANS

1. Name of your college:
2. Sex: __ Male Female
3. Year of birth:
4. Which of the following departments are under your supervision?
$\qquad$ Mathematics
$\qquad$ Psychology
___ Chemistry
___ Management
___ Electrical Engineering
5. How many years have you been an academic dean at this university? at other universities?
6. Would like to have an abstract of findings: $\qquad$ Yes No

APPENDIX N

## AUTOBIOGRAPHICAL FORM SENT TO PARTICIPATING ACADEMIC DEPARTMENT HEADS

## PERSONAL INFORMATION SHEET FOR DEPARTMENT HEADS

1. Name of your department: $\qquad$
2. Sex: $\qquad$ Male $\qquad$ Female
3. Year of birth: $\qquad$
4. Highest degree obtained: $\qquad$
5. Current academic rank: $\qquad$
6. Number of full-time faculty in your department: $\qquad$
7. Number of years as department head at this university: $\qquad$
8. Number of years as department head at other universities: $\qquad$
9. How did you become a department head?
$\qquad$ a. Appointment by dean or president without faculty consultation.
$\qquad$ b. Chosen by dean or president with faculty consultation.
$\qquad$ c. Elected by fellow faculty members.
$\qquad$ d. It is a rotating post. Each one serves when his or her turn comes.
$\qquad$ e. Other (Please specify) $\qquad$
10. Were you selected to be a department head for a:
$\qquad$ limited term?
$\qquad$ indefinite term?
If you were selected for a limited term, now many years is each term? $\qquad$
If invited to do so, would you consider serving an additional term as department head at this university? ___ Yes ___ No ___ Maybe
11. If invited to do so, would you consider serving as department head at another university? $\qquad$ Yes $\qquad$ No $\qquad$ Maybe
12. Would like to have an abstract of findings: $\qquad$ Yes $\qquad$ No

APPENDIX 0

AUTOBIOGRAPHICAL FORM SENT TO
PARTICIPATING FACULLTY MEMBERS

PERSONAL INFORMATION SHEET FOR FACULTY MEIMBERS

1. Name of your academic department:
2. Sex: Male Female
3. Year of birth:
4. Highest degree obtained:
5. Current academic rank:
6. Number of years in current department:
7. Number of years at other colleges:
8. Would like to have an abstract of findings: $\qquad$ Yes No

# vita 2 <br> Mathew Roman Mumbwa <br> Candidate for the Degree of <br> Doctor of Education 

Thesis: SELECTION OF ACADEMIC DEPARTMENT HEADS IN DOCTORATE-GRANTING UNIVERSITIES

Major Field: Higher Education
Minor Field: Mathematics
Biographical:
Personal Data: Born at Dedza, Malawi, August 15, 1945, the son of Mr. and Mrs. Roman Mumbwa.

Education: Graduated fř̃om Mtendere Secondary School, Dedza, Malawi, with a Cambridge School Certificate in June, 1964; received Bachelor of Science degree in Mechanical Engineering from University of Southern California, Los Angeles in 1971; received Master of Science in Teaching degree from University of Florida, Gainesville in 1975; completed requirements for the Doctor of Education degree at Oklahoma State University in May, 1983.

Professional Experience: Lecturer in Mathematics, University of Malawi, 1971-1974; on study leave at University of Florida, Gainesville, 1974-1975; resume duties at University of Malawi, 1975-1978; Graduate Teaching Assistant, Department of Mathematics, Oklahoma State University, 1978-1982.

