LEADERSHIP STYLES AND CHARACTERISTICS OF

OKLAHOMA STATE-SUPPORTED TWO-YEAR

COLLEGE DIVISION/DEPARTMENT

CHAIRPERSONS

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THE RESEARCH PROBLEM

Introduction

The extent and magnitude of continuous and rapid change which

organizations face is well described by Bennis (1973):

> Everything nailed down is coming loose and it does seem
> that no exaggeration, no hyperbole, no outrage can
> realistically appraise the extent and pace of moderni-
> zation. Exaggerations come true in only a year or two.
> Nothing will remain in the next ten years--or there will
> be twice as much of it. (p. 297).

A major responsibility of the management of any organization--whether

it be a business, a governmental agency, or an educational institution

directly affected by change, is to deal with external and internal

forces influencing the organization. The magnitude and rapidity of

change place tremendous pressure on every organization's management.

Thus a major issue facing management is how to deal with the ever

increasing onslaught of change which impinges on the vitality and

survival of the organization.

Like other managers, higher education administrators are facing

several new and demanding challenges. Wattenbarger (1977) cited

several forces of change: the lessening in the number of traditional

(18 to 21 year old) college students; the increasing number of part-

time students; the increasing emphasis on life-long learning; the

demands for general education curriculum reform; the aging population;

the increasing emphasis on corrective education; the increasing pressures for collective bargaining; and the increasing competition for available resources. He believes that today's college administrator is confronting an urgent need to provide dynamic leadership.

Boyer (1973) described the organization in which this need for leadership is most likely to arise as:

> . . . an intimate, cohesive, and autonomous community of scholars who collectively, amicably, and informally chart their own courses, with the president and deans merely carrying out what Rousseau would have called the "general will" of the campus. (p. 149).

Although reality might not correspond directly with this description, educational managers must not be content to let change occur as it will, hoping that appropriate courses of action will be taken. The managers must be able to develop flexible strategies to influence the impact of change on the college.

It may seem that a resurgence of one-person rule personified by William Rainey Harper of the University of Chicago (Rudolph, 1962) is the appropriate course of action, but this alternative is unthinkable when considered in light of the professional maturity, pride, and independence of today's scholars--not to speak of the anti-authoritarian sentiments of students (Boyer, 1973). Even in business organizations, the era of the autonomous corporation boss is rapidly coming to a close as more and more cooperate management teams share top management responsibilities.

The managerial revolution needed in higher education suggests the delegation of administrative authority to "middle managers" who have been developed as educational leaders (Boyer, 1973). Boyer also stated that:

> . . . college deans have acted in this capacity [one
> person rule] for decades. But the complexity and dis-
> persion of the modern campus, the build-up of pressures
> on top management . . . suggest a further spread of
> middle management authority in the future. (p. 173).

The four-year colleges and universities are joined by the two-year
institutions in this move toward leadership by middle managers. Writ-
ing about the problems confronting community college division/depart-
ment chairpersons, Hammons and Hunter (1977) stated that:

> . . . the two-year college is presently facing perhaps the
> biggest challenges in its 75-year history. To remain
> viable and fulfill a unique purpose and promise to the
> American public, it must quickly and effectively adapt to
> change in its external environment, in student clientele,
> internal organization, and instructional approaches; in
> short, it must adapt to change itself.
>
> Yet, the capacity of the two-year college to adapt to
> change depends primarily on the ability of the faculty
> and staff to change. That ability is further dependent
> on the capacity of the various administration in the
> college to lead and manage change. In this regard, no
> administrative position is more pivotal than the one
> held by the division or department chairpersons. (pp.
> 163-164).

Thus, it would appear that the growing demand for leadership
among middle managers (division/department chairpersons) in the two-
year colleges makes it important that attention be centered on the
leadership capabilities of those individuals who are currently serving
as chairpersons.

Need for the Study

Two-year college division chairpersons, numbering between 7500
and 10,000 in the American colleges (Lombardi, 1974), have been the
focus of a number of studies (Lombardi, 1974; Heimler, 1972; Harding,
1972), and much has been written about the role they play in the
activities of the divisions, their relationships with others in the

institution, and their personal characteristics. These studies have
indicated that the typical chairperson is a middle aged white male
with a master's degree who, having taught at the college, has been
appointed to his present position. Although suggesting that the
position of chairperson is the key to a smoothly functioning college,
Lombardi (1974) and Freligh (1973) found that training for the posi-
tion was virtually non-existent. The only identified source of
training was in-service meetings conducted by the dean. Recognizing
this lack of training, Harding (1972) developed an orientation package
to aid department chairpersons in community colleges adjust to their
new roles. However, the focus of his work was directed primarily
at routine administrative tasks, and no consideration was given to
the chairperson's ability to lead others.

The demand for leadership to deal with change makes it important
that research be focused on factors influencing chairperson leader-
ship behavior. Though it is not practical to attempt to identify all
the factors which influence the development of leadership behavior,
it would seem especially important to ascertain the impact of selected
personal and environmental factors on an individual leadership style.

Statement of the Problem

Although much of the research dealing with leadership and leader-
ship styles has been conducted by professors serving colleges and
universities, the foci of the research and application, with the
exceptions in unpublished dissertations (Schroeder, 1969; Ledgerwood,
1971; Reddin, 1972; Cheri, 1975; Schmitt, 1975; Washington, 1975),
have been the industrial and the military organization. Two-year

college authorities have made limited attempts to investigate college leadership, with the results often being a description of "good" leaders. They are available, current, democratic, independent, open, organized, productive, prompt, and selfless (Ravetch, 1972). Since these descriptions provide little information which would assist in identifying and developing leaders, it is believed that one might productively utilize, in a two-year college setting, the concepts and assessment instruments developed by educators for industry. The problem was identified, therefore, as a need to investigate the relationships between selected personal and environmental factors and the leadership styles of two-year college division chairpersons. Simply stated--Do relationships exist between selected personal and environmental factors and individual two-year college chairperson's leadership style?

Purpose of the Study

This study was conducted to develop information which may help college administrators understand the leadership behavior of chairpersons better by determining the significant relationships between selected demographic data and leadership styles of division/department chairpersons in Oklahoma state-supported two-year colleges.

A secondary purpose of this study was to obtain descriptive characteristics of the sample of chairpersons using a demographic data sheet developed by the investigator. This was done in order to gather base line data to understand and describe the sample better.

Major Questions for Investigation

The study was designed to investigate several hypotheses on the relationship of certain personal and environmental factors to chairperson leadership styles. A factor which may be either a personal or environmental influence is the academic discipline group. In the study the following groups of disciplines were used: Humanities, Social Sciences, Science, Applied Science, Business, and other. The major questions addressed in this study are:

1. Are there significant differences in the orientation toward task accomplishment, personal relationships and effectiveness among division/department chairpersons of different academic discipline groups?

2. Are there significant differences in the orientation toward task accomplishment, personal relationships and effectiveness among division/department chairpersons having different ages, experience (current position, teaching, educational administration, and administration in non-educational organizations), educational levels and management education?

3. Are there significant differences in orientation toward task accomplishment, personal relationships and effectiveness between division/department chairpersons of different sexes?

4. Are there significant differences in orientation toward task accomplishment, personal relationships and effectiveness between division/department chairpersons and chief academic officers?

Theoretical Base

William J. Reddin's 3-D Theory of Managerial Effectiveness is the base used in this study to describe the subjects' leadership styles. Reddin (1970) described the theory by stating:

At the heart of the 3-D Theory is a very simple idea. It was discovered in a long series of research studies conducted by psychologists in the United States. They discovered that the two main elements in managerial

behavior concerned the task to be done and relationships
with other people. (p. 11).

. . . .

These two factors are described as independent because
the extent to which a manager uses one of them does not
help to predict the amount of the other he is using.
This is a vital point for it means that a manager may
be using much of both, little of both, much of one and
little of the other, or any combination in varying
degrees of these two factors. (p. 21).

Since they are independent dimensions of an individual's behavior,

the factors can be drawn as axes on a two dimensional graph (Figure 1).
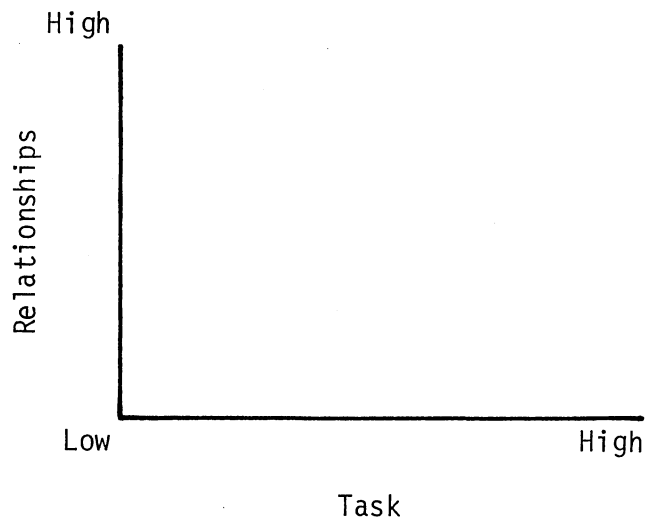
Figure 1. Task vs. Relationships

The terms used by Reddin (1970) to describe these dimensions are Task

Orientation (T_O) and Relationships Orientation (R_O). Definitions of

these terms are found on page 12.

Reddin contended that the extent to which the two factors are

exhibited by the individual describes his overall leadership behavior

which is reflected in the specific way he acts while directing and
coordinating the activities of the group.

Reddin (1970) also developed the idea of basic style, which he
described as "the way in which a manager behaves as measured by the
amount of Task Orientation and Relationships Orientation he uses."
(p. 33). The four basic styles, which identify the four combinations
of high and low T_O and R_O, are Separated, Dedicated, Related, and
Integrated. These basic styles are shown graphically in Figure 2 and
defined on page 13.
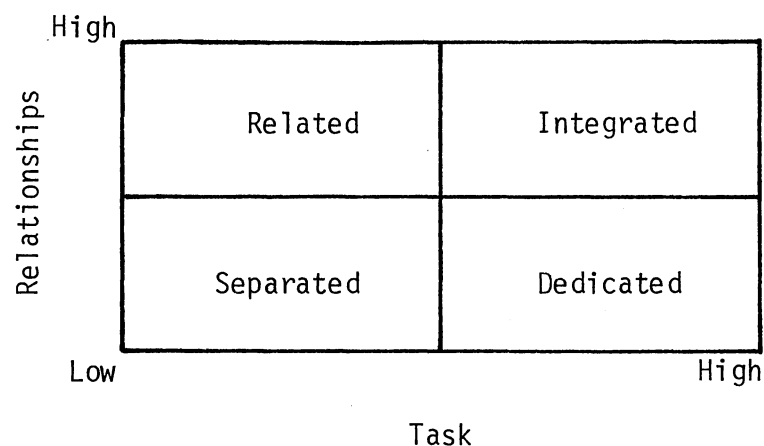
Figure 2. Basic Leadership Styles

Reddin suggested that none of these basic styles is effective or in-
effective in and of itself. He stated that:

> There is no consistent evidence that one style is generally
> more effective than the other. To suggest that there is,
> is to make what the social scientists call the normative
> error, that is, to suggest that one thing is better than
> another based only on what one prefers to believe rather
> than on what the evidence suggests. Managers must say
> farewell to the manager who picks up a single behavioral

theory at a seminar and spends the next few years chanting,
'Let us all become like I became,' and changes no one in
the process. (pp. 38-39).

He then introduced the third dimension:

Management is too complex to be encapsulated by a single
belief. Managerial training must aim at style flexibility
rather than style rigidity--not even at a rigid ideal
style. . . . Styles are best seen in relation to specific
situations. Any style has a situation appropriate to it,
and many situations inappropriate to it. . . . The added
third dimension could be labeled 'appropriateness of
style to situation.' As this appropriateness results in
effectiveness, 'E' for short, this term is used instead.
(p. 39).

The effectiveness of a particular basic style, when applied in a

given situation, therefore determines the third dimension of the 3-D

Theory. Figure 3 presents the three dimensions as described by Reddin.

Relationships / Effectiveness / Tasks
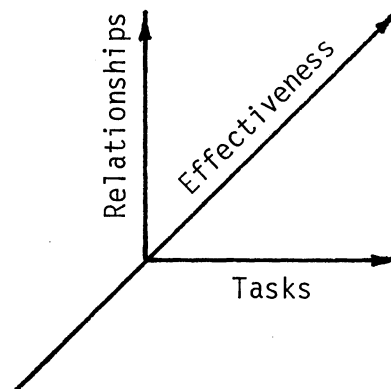
Figure 3. Tasks vs. Relationships vs.
          Effectiveness Leadership
          Dimensions

In order to convey the idea of the appropriateness of a particular

basic style when applied to a given situation, Reddin (1970) selected

labels to describe both the basic style and the appropriateness of
the application. Reddin (1970) stated that "the eight labels were
deliberately choosen as strong stuff, and each suggests that the style
is good or poor." (p. 43). These labels are shown in Table I.

TABLE I

INAPPROPRIATE AND APPROPRIATE LEADERSHIP STYLES
AND ASSOCIATED BASIC STYLES

When Used Inappropriately (Less Effective)	Basic Style	When Used Appropriately (More Effective)
Compromiser	Integrated	Executive
Deserter	Separated	Bureaucrat
Autocrat	Dedicated	Benevolent Autocrat
Missionary	Related	Developer

(Reddin, 1970, p. 40)

Reddin emphasized that these eight styles are not additional types of
behavior. Rather they are labels which convey the appropriateness of
the associated basic style in a given situation (See Figure 4). Reddin
found that most individuals tended to adopt one leadership style
which he feels most comfortable with and uses most frequently.
"Dominant Style" is the term used to describe a leader's most fre-
quently used style.

More Effective Styles

Developer	Executive
Bureaucrat	Benevolent Autocrat

Basic Styles

R_0 ↑

Related	Integrated
Separated	Dedicated

T_0 →

Effectiveness

Less Effective Styles

Missionary	Compromiser
Deserter	Autocrat
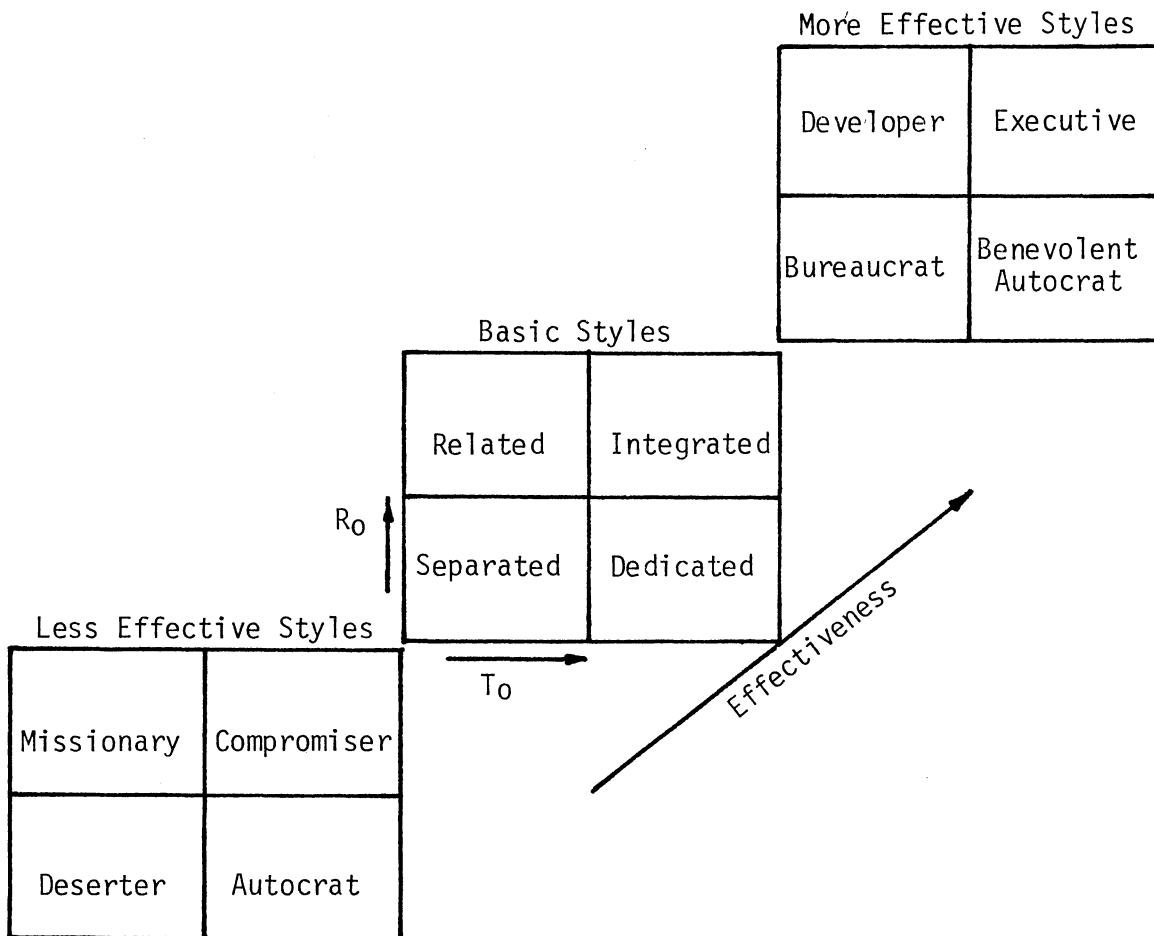
Figure 4. The 3-D Model (Reddin, 1970, p. 40)

Definition of Terms

Division/Department Chairperson is the formally designated head of the smallest instruction-related administrative unit in an Oklahoma state-supported two-year college.

Division/Department is the smallest formal instruction-related administrative unit within an Oklahoma state-supported two-year college.

Chief Academic Officer is the college administrator in an Okla-

homa state-supported two-year college who exercises general authority over the instructionally related activities within the college. Although the specific position title varies among the colleges, he is the immediate superordinate of individual division/department chairpersons.

Oklahoma State-Supported Two-Year Colleges are colleges offering educational programs of less than a baccalaureate level and being supported by state funding as full members of the Oklahoma System for Higher Education.

Leadership is the process in influencing the activities of an individual or a group in efforts toward goal achievement in a given situation.

Leadership Style is the "consistent manner in which actions are performed in helping the group move toward goals acceptable to its members" (Schmitt, 1975, p. 5). It is operationally defined as the combination of an individual's Task Orientation, Relationships Orientation, and Effectiveness scores.

Task Orientation (T_0) is the extent to which a manager directs his own and his subordinates' efforts; characterized by initiating, organizing, and directing.

Relationships Orientation (R_0) is the extent to which a manager has personal job relationships; characterized by listening, trusting, and encouraging.

Leader Effectiveness (E) is the extent to which a leader achieves the output requirements of the position.

Basic Leadership Style is the way in which a manager behaves as measured by the amount of Task Orientation and Relationships Orienta-

tion he uses. The four basic styles are Integrated, Dedicated, Related, and Separated.

Separated Style is that basic leadership style, as measured by the Management Style Diagnosis Test, characterized by less than average Task Orientation and less than average Relationships Orientation.

Related Style is that basic leadership style, as measured by the Management Style Diagnosis Test, characterized by less than average Task Orientation and more than average Relationships Orientation.

Dedicated Style is that basic leadership style, as measured by the Management Style Diagnosis Test, characterized by more than average Task Orientation and less than average Relationships Orientation.

Integrated Style is that basic leadership style, as measured by the Management Style Diagnosis Test, characterized by more than average Task Orientation and more than average Relationships Orientation.

Management Style Diagnosis Test (MSDT) is a self-reported assessment instrument designed to identify an individual's pre-disposed leadership style.

Definitions, including descriptive phrases, are offered by Reddin (1970) in an attempt to give the reader as clear a picture of the eight leadership styles as possible.

> Executive. A manager who is using a high Task Orientation and a high Relationships Orientation in a situation where such behavior is appropriate and who is, therefore, more effective; perceived as a good motivating force who sets high standards, treats everyone somewhat differently, and prefers team management.

> Compromiser. A manager who is using a high Task Orientation and a high Relationships Orientation in a situation that requires a high orientation to only one or neither and who is, therefore, less effective; perceived as being

a poor decision maker, as one who allows various pressures
in the situation to influence him too much, and as avoid-
ing or minimizing immediate pressures and problems rather
than maximizing long-term production.

Benevolent Autocrat. A manager who is using a high Task
Orientation and a low Relationships Orientation in a
situation where such behavior is appropriate and who is,
therefore, more effective; perceived as knowing what he
wants and how to get it without creating resentment.

Autocrat. A manager who is using a high Task Orientation
and a low Relationships Orientation in a situation where
such behavior is inappropriate and who is, therefore, less
effective; perceived as having no confidence in others,
as unpleasant, and as interested only in the immediate
task.

Developer. A manager who is using a high Relationships
Orientation and a low Task Orientation in a situation
where such behavior is appropriate and who is, therefore,
more effective; perceived as having implicit trust in
people and as being primarily concerned with developing
them as individuals.

Missionary. A manager who is using a high Relationships
Orientation and a low Task Orientation in a situation
where such behavior is inappropriate and who is, there-
fore, less effective; perceived as primarily interested
in harmony.

Bureaucrat. A manager who is using a low Task Orientation
and a low Relationships Orientation in a situation where
such behavior is appropriate and who is, therefore, more
effective; perceived as being primarily interested in
rules and procedures for their own sakes, as wanting to
control the situation by their use, and as conscientious.

Deserter. A manager who is using a low Task Orientation
and a low Relationships Orientation in a situation where
such behavior is inappropriate and who is, therefore, less
effective; perceived as uninvolved and passive or negative.
(Reddin, 1970, pp. 41-43).

Assumption

The variables affecting the functions of the chairpersons are
assumed to be homogeneous among the participating colleges.

Limitations of the Study

This study was limited to chairpersons and chief academic officers employed in Oklahoma state-supported two-year colleges whose organizational staffing plan included division/department chairpersons as defined in this study. Extensive extrapolation beyond this would not be directly supported by this study.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Although there are studies dealing with the broad area of leadership and college administration, the review presented in this study was restricted to the following specific areas of consideration: current knowledge concerning division chairperson's characteristics, role, and effectiveness; and theory related to leadership and leadership style.

Current Knowledge Concerning College
Division Chairpersons

Even though the study of college administrators has received considerable attention during the last two decades, Richardson (1968) reported that " . . . while some information is available on the role of the departmental chairman in the four-year institution, the situation becomes a famine when we examine the literature of the junior college." (p. 244). After reviewing the available research, Wallace (1975) stated that: "Although the famine conditions of the middle sixties have not given way to a feast of observations, the larder is fortunately now stocked, at least moderately, with significant works on the subject." (p. iii).

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Studies of Four-Year College Chairpersons

Apparently the growth experienced by the two-year colleges during the last twenty years has generated an increased interest in the two-year college department chairpersons. However, to understand why it remains true that much of the substantive literature pertaining to chairpersons deals primarily with four-year colleges and universities, one has only to examine what has been studied and written about to find that there is a larger body of background knowledge and research dedicated to the four-year colleges and universities.

For example, Rudolph (1962) stated that the development of hierarchy within the American university brought with it the concept of departmentalization and thus the birth of a new role in higher education--the department chairperson. The role has grown in prominence since those days when James Marsh proposed departmentalization at the University of Vermont in the early 1800's.

In many small liberal arts colleges, because the faculty can work directly with the dean on most matters, there is little need for powerful chairpersons. The larger colleges have found it effective to organize into divisions or departments, delegating much of the management activities downward to chairpersons. This delegation often causes the role to become managerial or administrative in nature rather than collegial. Thus, a significant factor influencing the role of the chairperson is the size of the institution (Anderson, 1976).

In reviewing the role of the chairperson, it becomes apparent that it is complex and indeed may be unique for each individual chairperson. After studying state-supported four-year colleges, Hill and French (1971) found that the role and influence of the position

of the chairperson was directly related to the influence or power of the individual chairperson. Their findings supported a previous study by Corson (1960) who, after studying a selected group of four-year colleges and universities, concluded that the role of chairperson varied among institutions in direct relationship to the personality of the individual chairperson.

The complexity and diversity of the role is summarized well by Dressel, Johnson, and Marcus (1970), who concluded that the position of department chairmen is vague, often misunderstood, and not clearly perceived.

Recognizing the fact that the role of the chairperson varies significantly, Richardson (1968) stated that:

> His recommendations in the area of personnel administration, including selection, retention, salary increment, and promotion are seldom countermanded. He is vitally involved in the development of the class schedule with all of the implications this holds for such matters as time, place, size of class, and instructor assignments. He occupies a pivotal position with respect to the general scope and specialization of subject matter in course offerings. The chairman . . . is a vital link in the often tenuous chain of communication between administration and faculty. He may hold the power to confer such benefits as choice office location and furnishings, access to secretarial assistance, and opportunities for participation in consulting and research ventures. . . . the department chairman will be closely consulted in matters such as selection of graduate students, credit for previous work, and honors programs. In addition to all of these responsibilities, the departmental chairman must oversee a multitude of routine clerical operations and encourage and facilitate good teaching and research. (p. 244).

Doyle (1953), studying the distribution of individual chairpersons' duties, found that they spend 50 percent of their time teaching and performing administrative duties; they are involved approximately 30 percent of the time in teacher supervision, guid-

ance activities, and sponsoring student activities; and they attend meetings and conferences during the remaining 20 percent of the time.

In a more recent survey administered by 32 doctorate granting public universities ranging in size from 9,000 to 21,000 students, McLaughlin and Montgomery (1976) reported the following major types of duties performed by chairpersons:

1. Student activities - teaching and advising students;

2. Graduate/research activities - supervising graduate teaching and research assistants, recruiting graduate students, obtaining and managing grants, gifts, and contracts, and encouraging faculty research;

3. Liaison activities - serving as a communication link with faculty, administration, and outside groups;

4. Controlling - record keeping, budgeting, and supervision of staff;

5. Faculty supportive activities - evaluation of faculty members, recruiting and selection, encouraging professional development, and maintaining morale and reducing conflicts among faculty; and

6. Planning activities - developing departmental plans and goals, planning the curriculum, and making general efforts to improve the department. (p. 81).

Because of these diverse roles, the chairperson can be one of the most influential individuals in the shaping of the college, for he is the leader of one of the most powerful subunits within the college-- the department (Burns, 1962). Burns also stated that, "with increasing specialization, faculty members identify most highly with their professional discipline and hence with the department where they are located." (p. 58). This closeness of identity provides substantial collective influence within the college, and this influence (power) is often centered in the chairperson. Corson (1960) stated very simply that "the departmental chairperson in the typical American

university is a (if not the) key administrative officer." (p. 88).

Beyond these descriptive analyses of roles, a few studies have reviewed the level of influence and effectiveness of chairpersons. Gunter's (1964) comparative analysis of the responsibilities of chairpersons in five small and five large state universities in ten western states suggested that, in addition to having more administrative training and experience, large university chairpersons were allowed greater opportunity and flexibility in decision making.

Others have investigated the relationships between the chairperson's power and departmental effectiveness. Hill and French (1971) conducted research at five state-supported four-year colleges in two western states and found that professors' job satisfaction was positively correlated with the power of their chairperson, and the individual professors were most satisfied when the chairperson has considerable personal influence; chairperson's power and faculty productivity were positively correlated; and professional research and the number of publications of professors were negatively correlated to chairperson's power. After defining the power of the chairperson as the "santions others in the situation perceive that he has available to employ in ways that will affect them" (p. 212), Hill and French (1971) identified scheduling, contracts with higher administration, committee formation, and information control as being the areas of greatest power, with the least being the ability to acquire funds and release time for faculty research, contracts leading to paid consulting jobs, and the ability to make unpaid "community service" assignments. This tends to suggest that McLaughlin and Montgomery's (1976) categories of liaison, controlling, and planning have the

greater potential for accomplishment by chairpersons than the other duties.

In a national study, Smart and Elton (1976) surveyed 1,200 chairpersons from 32 public universities using a three-dimensional clustering of departments (Pure-Applied, Hard-Soft, and Non-life-Life). They found that there were distinctive role demands for different types of chairpersons and recommended that specialized training programs be designed to enhance the administrative effectiveness of chairpersons. In addition they suggested that the programs be oriented toward meeting the distinctive demands placed on different types of academic departments.

Studies of Two-Year College Chairpersons

The two-year college, a relatively recent development in American higher education, adopted its established predecessor, the university, as an organizational model. Thus, the dominant organizational system found in the two-year college is the departmental structure. In smaller colleges, however, one may find that the teaching faculty are responsible directly to the dean with no intervening administrator. In others, a common pattern is the division encompassing a related grouping of subject areas (Russell, 1972).

The instructional subunit, the division/department, is led by a chairperson. Lombardi (1974), in reviewing the characteristics of chairpersons, found that:

1. About 75 percent are 40 years of age or older, and very few are younger than 30 years.

2. The great majority, 80 to 86 percent, are men.

3. Women predominate in secretarial sciences, nursing,

women's physical education, and home economics, but
when these departments are combined with others in
a divisional pattern, men normally hold the position.

4. There are few non-white chairpersons.

5. The majority (75 percent) hold master's degrees,
   while a smaller number have doctorates. Science
   departments report a higher proportion of doc-
   torates (24 percent) than those of other disci-
   plines.

6. When compared with academic department chairpersons,
   a larger proportion of occupational department
   chairpersons hold only a bachelor's degree or less.

Harding (1972) surveyed chairpersons in 75 community colleges and

found that:

1. Sixty-eight percent of the chairpersons hold the
   master's degree.

2. Twenty percent hold the doctorate.

3. Twelve percent have no other degree but the bachelor's.

4. Almost three-quarters of the chairpersons were appointed
   to the position by the administration.

The chairperson is most often appointed to the position; serves

at the pleasure of the president for a fixed term of from one to

three years; and normally has the opportunity for reappointment

(Lombardi, 1974; Wallace, 1975). Russell (1972) identified the

appointment method of selection as an important reason that the posi-

tion is one of substantial influence within the college. Other

administrators come to depend on the chairperson's recommendations

and stability, a situation which suggests that the two-year college

chairperson, like his four-year colleague, may well be the key in

the functioning of the college instructional program. Richardson's

research (1968) supports this contention since he found that the

two-year college administrative staffs are not normally as complex

as those of the four-year college or university, and, consequently, the division/department chairperson is assigned greater administrative responsibility.

Koehnline and Blocher (1970) represented the position taken by most authors concerning the pivotal character of the chairperson when they concluded that: "For most community [two-year] colleges, the most effective operational units are divisions, and the key to the success of the program is in the position of the division chairperson." (p. 8).

That position is most often given the title of chairman or head, but the majority of the incumbents are classified as faculty since they have varying teaching responsibilities. Lombardi (1974) reported that 97 percent teach an average of nine credit hours in addition to supervising an average of 10 full-time faculty and several part-time instructors. In addition to the regular salary they will normally receive remuneration for serving as chairperson.

After examining a listing of the duties or responsibilities for which the chairperson has been charged, one tends to observe that he is often expected to be "all things to all people." Such duties include: serving as liaison between faculty and administration; re-cruiting, evaluating and retaining qualified faculty and staff; de-veloping and monitoring budgets to meet the instructional needs of the division; developing class schedules which are designed to meet students' needs and which utilizes the teaching potential of the division; reviewing and developing the curriculum within the division; teaching classes; resolving disputes between students and faculty and among faculty; providing for faculty and staff development;

serving on institutional committees and task forces; working with community advisory committees; and articulating courses with four-year colleges and universities (Doyle, 1953; Pierce, 1971; Lombardi, 1974). Harding (1972) reported that the chairpersons responding in his study indicated that the major portion of their time was devoted to departmental activities rather than to teaching. He listed the following activities of chairpersons in decreasing order of average time consumption: teaching (5.5 hrs/wk); conferring, helping, and/or evaluating teachers (4.5 hrs/wk); counseling (4.4 hrs/wk); clerical and record keeping (4.0 hrs/wk); chairmen and administrative meetings (2.9 hrs/wk); outside educational commitments (2.3 hrs/wk); and departmental meetings (0.8 hrs/wk).

Given the nature and diversity of the tasks, some investigators have attempted to determine the effectiveness of chairpersons in satisfying their assigned responsibilities and to identify the major problems faced by chairpersons.

Pierce (1971), for example, studied the responses of 285 science division chairpersons from public and private two-year colleges in the United States and concluded that:

1. The chairpersons need more authority in such key areas as faculty personnel administration (hiring, retention, and promotion), budget, administrative planning, and policy making in their curriculum areas.

2. Most of the respondents had too little time for the effective performance of their assigned tasks. This lack of time was most often the result of teaching loads which were considered too heavy when compared with the amount of administrative work demanded of the chairperson.

3. The obstacle most often mentioned by the division chairpersons as the greatest impediment to effective role fulfillment was their inability to gain and maintain the trust and confidence of their

teaching staffs.

4. Human relations problems were most often listed as
    the greatest challenge to their administrative skill.
    (p. 18).

The responsibilities of chairpersons in community-junior colleges
in the Southern Association was the focus of Sanchez's study (1974).
He found that the majority of those chairpersons responding felt
that they did not possess authority commensurate with their responsi-
bilities.

Still another author, O'Grady (1969), investigated various aspects
of the chairperson's role in selected community colleges in Illinois
and Missouri. After interviewing approximately 80 chairpersons, he
concluded that:

1. Chairmen in smaller community colleges spend signifi-
    cantly more time teaching, advising or counseling
    students while their colleagues in larger colleges
    spent more time on administrative duties.

2. A significantly higher percentage of chairmen in
    large colleges had well-defined roles. They also
    received more released time from teaching in order
    to perform their role.

3. A significantly higher percentage of chairmen in
    large colleges had the responsibility for budget
    preparation and recruitment of faculty.

4. A significantly higher percentage of chairmen in
    large colleges perceived their role as becoming
    more administrative in the next several years. (pp.
    145-149).

At a 1975 workshop co-sponsored by the Pennsylvania State Univer-
sity Center for the Study of Higher Education and the American
Association of Community and Junior Colleges, 63 chairpersons from
30 institutions located in 20 different states were asked to identify
and prioritize the obstacles which limited their effectiveness in
fulfilling their responsibilities. Hammons and Hunter (1977) reported

the findings of the workshop and listed the major obstacles as:

1. Lack of clear role definition.

2. Weak support and direction from upper-level administrative personnel.

3. Faculty-related problems.

4. Internal organization/management problems.

5. Non-academic controls on the chairperson.

6. Constraints on decision-making ability.

7. Downward participation in management.

Although the authors pointed out that many of the obstacles or problems were external to the chairperson and therefore outside of his direct control, they concluded that: "several of the troubles that beset the position can be significantly dealt with by individuals who clearly perceive them and are equipped with the skills to cope with them." (p. 168).

Following a discussion of the administrative role of the chairperson, Lombardi (1974) stated that: " . . . defining leadership is infinitely more difficult than describing administrative skill. At the same time, a chairman's reputation [effectiveness] more often depends on his leadership role than on his administrative skill--a paradoxical situation, since leadership is such an amorphous concept." (p. 13).

If, as Lombardi wrote, the effectiveness of a chairperson is most often dependent upon his leadership role, the concepts of leadership are appropriate for discussion.

Leadership and Leadership Styles

The traitist theory of leadership resulted from early studies

which identified and described the characteristic traits of an effec-
tive leader. Aristotle, for example, in describing kingly behavior
in Politics, might be called an early proponent of the traitist
theory:

> He must be careful about the public funds, . . . he must
> appear not harsh but dignified, that is he must inspire
> respect rather than fear in those he encounters. As far
> as bodily pleasures are concerned . . . he should pre-
> ferably be moderate in such things, . . . He must appear
> to his subjects to be not a tyrannical ruler but an
> administrator or king, not an expropriator but a trustee,
> and in his life seek not excess but moderation. As a
> result, not only will his rule inevitably be nobler and
> more enviable, . . . but also his rule will be longer.
> (pp. 58-59).

The traitist theory assumes that possession of certain character-
istic traits allows an individual to be effective as a leader, and,
since one's effectiveness is a direct result of these traits, the
leader will be effective or ineffective in all situations. Those
individuals who subscribe to this theory have conducted studies
attempting to develop a common set of desirable traits which could
be used to identify effective or potentially effective leaders. Al-
though these studies have provided several listings of somewhat de-
sirable human characteristics; that is, independence, honesty,
friendliness, aggressiveness, intelligence, openness, dynamism,
truthfulness, Stogdill (1948), after reviewing over 100 studies, con-
cluded that:

> The finding suggests that leadership is not a matter of
> passive status, or the mere possession of some combination
> of traits. It appears rather to be a working relationship
> among members of a group, in which a leader acquires
> status through active participation and demonstration of
> his capacity to carry cooperative tasks through to com-
> pletion. (p. 66).

Hershey (1975) restated this conclusion:

A review of the research literature using this trait
approach to leadership has revealed few significant
or consistent findings. As Eugene E. Jenkins (1961)
concluded, 'Fifty years of study have failed to pro-
duce one personality trait or set of qualities that
can be used to discriminate leaders and non-leaders.'
(p. 25).

The idea of desirable traits is not necessarily wrong, wrote

Reddin (1970), but rather the absence of a consistent theoretical base

which suggests which traits are appropriate for given situations makes

the traits concept unworkable. For some time behavioral scientists

have assailed the traitest theory. They believe that possession of

a set of characteristic traits, no matter how noble, is no guarantee

of effective leadership; furthermore they contend that since human

relations are dynamic, leaders are confronted with various situations

which they cannot deal with effectively in a consistently uniform way

(Stogdill and Coons, 1957; Reddin, 1970; Hershey and Blanchard, 1972;

Hershey, 1975).

Recognizing the importance of human factors, researchers began to

examine the kind of leadership and related variables employed within

organizational units which were "most effective" in meeting organi-

zational goals in contrast with those used in the "least effective"

units. Thus, the study of leadership theory was redirected toward

describing leader behavior using a uni-dimensional continuum to

catagorize behavior from authoritarian-job related to democratic-

employee centered (White and Lippitt, 1960). A visual representation

of this continuum, which was developed by Robert Tannenbaum and

Warren Schmidt (1957) and modified by Paul Hershey (1975) is shown

in Figure 5.

The leader's position on this continuum may well be dependent

upon his assumption concerning man's basic nature (Reddin, 1970, p. 189). In the democratic approach, man is seen as being basically self-directing, cooperative, and willing to attempt difficult tasks without coersion; in the authoritarian approach, man is lazy, un-reliable, and requires external force to motivate.

(Authoritarian) ◄─────────────────────────► (Democratic)

Task-Oriented   Relationship-Oriented

Leader Authority

Subordinate
Freedom

Leader makes and
announces decision

Leader "sells" decision

Leader presents ideas
and invites questions

Leader presents tentative
decision subject to change

Leader permits sub-
ordinates to function
within limits defined
by superior

Leader defines limits; asks
group to make decision

Leader presents problem, gets
suggestions, and makes decisions

Figure 5. Leadership Behavior Continuum

Assumptions occasionally held by leaders which Reddin (1970) con-cluded support the extreme positions on the continuum are presented in Table III. Others have approached the study of leadership by grouping the types of behavior exhibited by leaders. These efforts have re-sulted in groups such as: employee orientation and production orien-tation (Katz, Macoby, and Morse, 1950); group goal achievement and

group maintenance or strengthening (Cartwright and Zander, 1960); and relationship-motivated and task-motivated (Fiedler and Chemers, 1974). After reviewing each of the groups, it can be concluded that the similar types of production orientation, group goal achievement, and task-motivated closely coincide with the authoritarian concept described earlier while the employee orientation, group maintenance or strengthening, and relationship-motivated are democratic in character.

TABLE II

LEADERS' ASSUMPTIONS ABOUT MAN

Authoritarian	Democratic
- Man is a beast	- Man is a self-actualizing being
- Evil is man's inherent nature	- Good is man's inherent nature
- Biology drives man	- Humanism drives man
- Force motivates man	- Voluntary cooperation motivates man
- Competition is man's basic mode of interaction	- Cooperation is man's basic mode of interaction
- Individual is man's social unit of importance	- Group is man's social unit of importance
- Pessimistic best describe man's view of man	- Optimistic best describes man's view of man

These studies seem to suggest an "either-or" situation; that is, a leader is concerned about achieving either the assigned task or

group harmony, but not both. However, other researchers investigating leadership behavior have found that, while some leaders exhibit concern for interpersonal relationships with little or no consideration for task achievement, others show little concern for people and an extreme desire for task accomplishment. There are also leaders who have little concern for either people or tasks, and still others who are highly concerned about both.

The leadership studies conducted by the Bureau of Business Research at Ohio State University have helped to answer the questions relating to the uni-dimensional approach. The findings of these several studies indicate that leader behavior is two-dimensional rather than a continuum. The dimensions were identified as Initiating Structure or concern for task accomplishment and Consideration or concern for people. Halpin (1959) described the dimensions as:

> Initiating Structure - Behavior of the leader in delineating the relationship between himself and the members of the work group and in endeavoring to establish well-defined patterns of organization, channels of communication, and methods of procedure.
>
> Consideration - Behavior of the leader which is indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and the members of his staff. (p. 4).

The findings of the several studies conducted during the late 1940's and early 1950's indicated that the dimensions, Initiating Structure and Consideration, were indeed separate and independent. A leader's behavior can therefore be described as any combination of Initiating Structure and Consideration.

To investigate this concept of two-dimensional leadership behavior, the staff of the Bureau of Business Research at Ohio State University developed an instrument to analyze leader behavior. The major focus

of the instrument, Leadership Behavior Description Questionnaire
(LBDQ), was the observed behavior of a leader and provided measures
of his performance at building relationships between the group and
leader in areas of organizing, communicating, and developing proce-
dures to accomplish the group task, and building relationships of
trust and cooperation within the group and the leader (Hemphill, 1958).

Robert Blake and Jane Mouton (1964), using similar dimensions
of task and relationships, considered a leader's predisposition rather
than observed behavior. The authors identified leader predisposition
as "concern for" stating that:

> Concern for is not meant to indicate how much (such as,
> how much production, meaning quantity), nor is it intended
> to reflect the degree that the needs of people are actually
> met. Rather emphasis here is on the degree of "concern
> for" which is present in the boss because his actions are
> rooted in, and flow out of his basic attitudes. What is
> significant is how a supervisor is concerned about pro-
> duction and how he concerns himself about people. (p. 8).

Blake and Mouton visually represented the predisposition model with
the Managerial Grid on which the horizontal scale represents the
leader's concern for production while the vertical scale depicts his
concern for people. Both scales range from one (low concern) to nine
(high concern).

The authors describe five leadership styles which coincided with
locations on the Managerial Grid (Figure 6) as:

> Impoverished (1-1). Exertion of minimum effort to get
> required work done is appropriate to sustain organiza-
> tion membership.

> Country Club (1-9). Thoughtful attention to needs of
> people for satisfying relationships leads to a comfort-
> able friendly organization atmosphere and work tempo.

> Task (9-1). Efficiency in operations results from
> arranging conditions of work in such a way that human

elements interfere to a minimum degree.

Middle-of-the-Road (5-5). Adequate organization per-
formance is possible through balancing the necessity
to get out work while maintaining morale of people at
a satisfactory level.

Team (9-9). Work accomplishment is from committed
people; independence through a "common stake" in
organizational purpose leads to relationships of trust
and respect. (Blake and Mouton, 1964, p. 10).
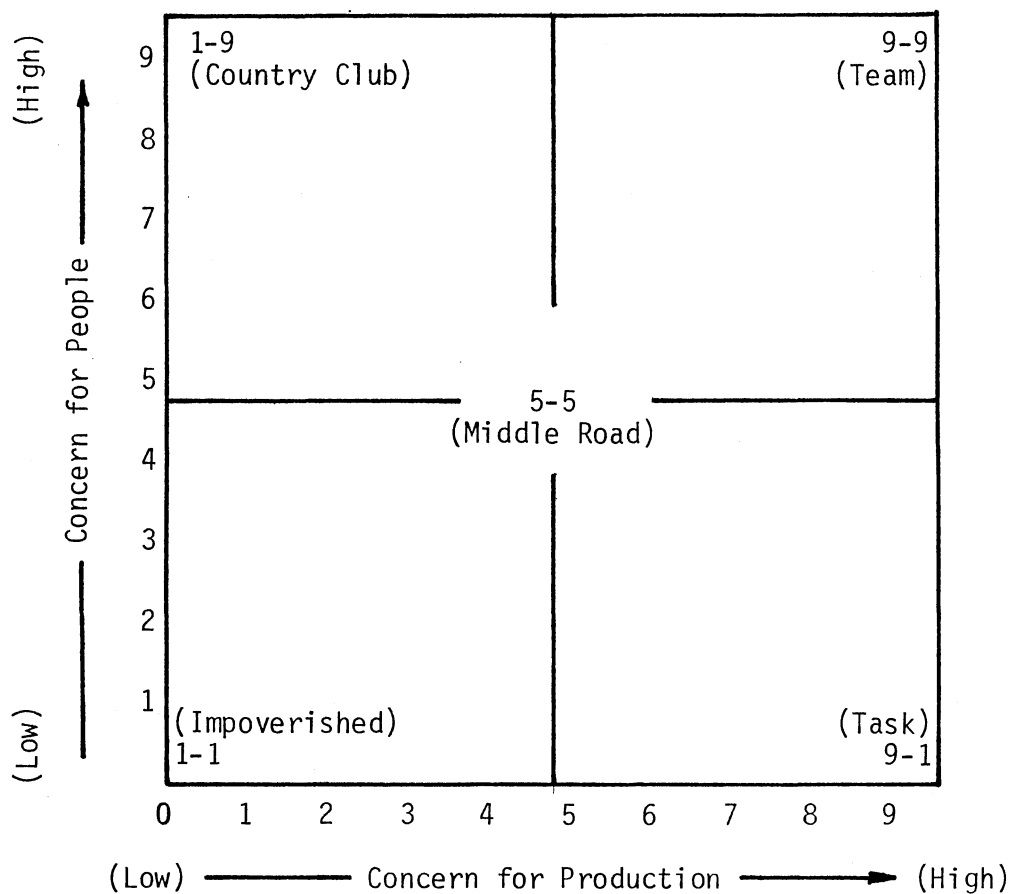
Figure 6. The Managerial Grid

That there exists a single best or "ideal" leadership style is a common assumption which may be found in each of the leadership theories previously discussed. This ideal style is assumed to apply to all situations, and those individuals who exhibit it should be recruited, trained, and placed in leadership roles. However, little consistency is found among the various studies supporting the position that there is an ideal style which applies to all situations (Reddin, 1970; Fiedler and Chemers, 1974; Cherri, 1975; Schmitt, 1975).

Recent studies have investigated the influence of the situation on leadership style and effectiveness. These studies have supported the contention that a leader's effectiveness varies not only in relation to leadership style but also in direct relation to how the leader's behavior relates to the demands of the situation. Reddin (1970) stated that: "The effectiveness of any behavior depends on the situation in which it is used. To know how to be effective, then a manager needs to know how to read situations." (p. 61).

Fiedler (1974) examined the influence and effectiveness of business executives and developed the Leadership Contingency Model Theory. In Leadership and Effective Management, he concluded that: "Different types of situations obviously call for different types of behavior, and there is no reason to believe that a highly structuring leadership behavior will always be effective." (p. 49). His Contingency Model presents the situational factors influencing the leader's effectiveness. The first is the Interpersonal Relationship between the leader and the group members which is influenced by the leader's personality, the individual personalities of the group members, and the group's acceptance of the leader. The second factor is the Task

Structure which is influenced by the degree to which the specific task requirements are defined. The final factor is Position Power which is affected by the extent to which the leader enjoys influence over the group through legitimate authority. Therefore, the individual's leadership style and the extent to which the situation is favorable to his exerting influence on the activities of the group will determine the leader's effectiveness (Fiedler and Chemers, 1974).

Building on the two dimensional concept of leadership; that is, task behavior and relationship behavior, Paul Hershey developed the Situational Leadership Theory (Hershey, 1975). This theory, formerly called Life Cycle Theory of Leadership (Hershey and Blanchard, 1972), recognizes situational factors and describes their influence on the leader's effectiveness. The author stated that the theory:

> . . . is based upon an interplay between (1) the amount of direction (task behavior) a leader gives, (2) the amount of socio-emotional support (relationship behavior) a leader provides, and (3) the "maturity" level that followers exhibit on a specific task (Hershey, 1975, p. vi).

The instrument developed to support the Situational Leadership Theory, the Leader Effectiveness and Adaptability Description (LEAD), provides self-generated data which, when analyzed, provides insight into a leader's self-perceived behavior. In addition to providing an individual's leadership style and the degree of task and relationships orientation, the LEAD provides "style adaptability--effectiveness." This third dimension of leadership is "the degree to which the leader's behavior is appropriate to the demands of a given situation." (Hershey, 1975, p. 179).

Hershey (1975) identified William J. Reddin as one of the first behavioral scientists to add the effectiveness dimension to leadership

theory. In his 3-D Theory of Managerial Effectiveness, Reddin (1970) used Task Orientation (T_O) and Relationships Orientation (R_O) to determine an individual's basic style. The four basic styles, Separated, Dedicated, Related, and Integrated, are shown in Table III along with the corresponding styles which have been identified by others. Reddin (1970) related the four basic styles to the situational dimension of leadership behavior or situational sensitivity-effectiveness.

> These four basic styles represent four types of behavior.
> Not all types of managerial behavior will fit neatly into
> these four types, but they are very useful as a general
> framework. . . . Further research conducted at several
> universities clearly indicate that any of the four basic
> styles of behavior could be effective in certain situations
> and not effective in others. None are more or less effec-
> tive in themselves. Their effectiveness depends on the
> situation in which they are used. This means that each
> one of the four basic styles has a less effective equiva-
> lent, resulting in eight managerial styles:

Basic Style	Less Effective Style	More Effective Style
Integrated	Compromiser	Executive
Dedicated	Autocrat	Benevolent Autocrat
Related	Missionary	Developer
Separated	Deserter	Bureaucrat

> These eight managerial styles then are eight additional
> kinds of behavior. They are simply the names given to
> the four basic styles when used appropriately or in-
> appropriately. (p. 39).

A central feature which distinguishes Reddin's 3-D Theory of Managerial Effectiveness from theories proposed by others is the concept called "Style Flex," which deals with the leader's ability to "vary his or her basic style behavior appropriately to changing situations." (Reddin, 1970, p. 58).

The instrument developed by Reddin to evaluate self-perceived leadership style is the Management Style Diagnosis Test (MSDT). Feed-

TABLE III

BASIC LEADERSHIP STYLES

Investigator	Style			
Reddin (1970)	Separated	Dedicated	Related	Integrated
	(Less than average T_0 and less than average R_0)	(More than average T_0 and less than average R_0)	(More than average R_0 and less than average T_0)	(More than average R_0 and more than average T_0)
Tannenbaum and Schmidt (1957)	---	Authoritarian	Democratic	---
Hemphill (1958)	Low Consideration--Low Structure	High Structure Low Consideration	High Consideration--Low Structure	High Consideration--High Structure
McGregor (1960)	---	Theory X	Theory Y	---
Blake and Mouton (1964)	Impoverished (1-1)	Task (9-1)	Country Club (1-9)	Team (9-9)
Hershey and Blanchard (1972)	Low Task Low Relationships	High Task Low Relationships	High Relationships--Low Task	High Task High Relationships

back resulting from an analysis of this "predisposition" questionnaire provides information about the leader's Task Orientation (T_O), Relationships Orientation (R_O), and Effectiveness-Flexibility (E) which can be expressed quantitatively and in terms of the managerial styles previously described. The test will be discussed in greater detail in Chapter III of this study.

Summary

The role of the chairperson is complex and often directly related to the personal power or influence of the individual who occupies the position. Although the duties performed by the chairperson may vary, they normally include personnel administration, class scheduling, liaison between faculty and administration, teaching classes, and planning.

The chairperson is considered a pivotal individual in the functioning of the college, and his influence within the college has been found to be positively correlated to professor job satisfaction. The chairperson is typically appointed to the position and is normally considered faculty since he has varying teaching responsibilities.

Chairpersons generally feel that there is too little time for the effective performance of their assigned tasks and that they do not receive adequate support or direction from upper-level administration. The effectiveness of a chairperson is most often dependent upon his skill in providing leadership.

The earliest studies investigating leaders and leadership focused on the distillation of a list of traits which could be used to identify individuals who are effective leaders or who have the

potential for becoming effective leaders. Although lists produced by such studies included desirable human characteristics, there was little consistency in the traits which were identified as being evidenced in effective leaders.

Subsequent studies which were designed to observe the behavior of leaders in effective and ineffective organizations developed a continuum of leadership behavior. This continuum included behavior ranging from job centered to employee centered, and a leader's behavior could be described as some position between the two extremes. As others observed the behavior of leaders, they identified two clusters of leader behavior: concern for task accomplishment and concern for relationships. These clusters were developed into two independent dimensions of leader behavior in which an individual could exhibit varying levels of one without affecting the other. Effective leaders were seen as those who demonstrated high levels of behavior in both dimensions.

The present emphasis of leader behavior research is focused upon the appropriateness of an individual's behavior in given situations. This situational approach suggests that there is no ideal behavior which can be effectively applied in all situations. Each leader behavior (style) is considered appropriate when applied in certain situations and inappropriate in others. The effectiveness of a leader is therefore dependent upon his ability to match leadership to varying situational demands.

CHAPTER III

METHODOLOGY

Description of the Population

The population consisted of the division/department chairpersons and chief academic officers employed in Oklahoma state-supported two-year colleges. Each of the 70 chairpersons and 12 academic officers serving at the colleges were informed of the purposes of the study and invited to participate; 67 chairpersons and every chief academic officer chose to participate. Descriptive data obtained from the participants concerning their characteristics are presented in Chapter IV of this study.

Instrumentation

The Management Style Diagnosis (MSDT) was selected for use in this study to determine the leadership styles of individual chairpersons and chief academic officers. The test is directly related to the 3-D Theory of Management Effectiveness and is described in detail by William J. Reddin in Managerial Effectiveness (1970).

The MSDT is a forced choice instrument consisting of 64 pairs of statements. It is designed to provide information about an individual's unique style of on-the-job leadership behavior. In completing the test, the respondent is requested to read two independent statements and select that statement which he believes best describes his

behavior in the person's present management situation.

Each of the statements was developed to be descriptive of behaviors of one of the eight leadership styles described on pages 13-14 and was reviewed by a panel of experts who sorted them to correspond with one of the leadership styles. The statements were tested and statistically refined to eliminate the less discriminating ones. The statements are matched in such a way that the respondent has an equal number of opportunities to select a particular style over every other style.

Scores for each of the leadership style demensions; that is, Task Orientation, Relationships Orientation, and Effectiveness are determined by summing the number of times the respondent selected statements which are descriptive of high orientation in the specific dimension. The range of possible adjusted raw scores for a given dimension extends from a minimum score of 12 to a maximum score of 46.

Because of the method of scoring the instrument, it is apparent that the scores obtained for Task Orientation, Relationships Orientation, and Effectiveness have some mutual dependency. Although this study was designed to investigate each dimension separately, it is recognized that inter-dependency between the stated hypotheses may exist.

Validity and Reliability of the MSDT

Reddin (1970) reported a study of 236 industrial middle managers who attended management workshops at a Canadian university. He found that 25 percent held a style synthesis of Executive (high T_O, high R_O, and high E) with both the Bureaucrat (low T_O, low R_O, and high E) and

Deserter (low T_O, low R_O, and low E) percentages being quite low (four percent and six percent respectively). Reddin suggested that "the distribution fits closely the expectations that might be held about selected managers who attend university seminars." (p. 243).

Thirty-three presidents and vice-presidents of an international conglomerate who completed the test exhibited a style synthesis distribution which indicated that 49 percent had an Executive style while all other styles fell at 15 percent or below. These findings were consistent with what may be expected of presidents and vice-presidents who because of the nature of their position, might be expected to show both high orientation toward task accomplishment and high orientation toward relationships.

Reddin (1970) reported another study of heads of voluntary agencies who "unlike managers, . . . do most of their work with people who have equal if not more power than they." (p. 243). This condition would tend to support the conclusion that leaders of such a group would be highly concerned with relationships. The results show that 41 percent of 59 people in the sample exhibited a style synthesis of Developer (low T_O, high R_O, and high E) with the Missionary (low T_O, high R_O, and low E) and Benevolent Autocrat (high T_O, low R_O, and high E) styles exhibited by another 12 percent each.

A three-week seminar attended by 62 research and development managers was sponsored by Ohio University. The participants were asked to complete the test, and the results supported the predictive accuracy of the MSDT. Managers of professional research groups find a high level of technical competence in the group members; there is also an intense desire to "find the answer" or complete the task.

Since there is inherent in the members of the group the strong individual loyalties to professional associations outside the group, the leader should be most concerned about group relationships. Therefore, one would anticipate that research and development managers would demonstrate high relationships and low task, a Related basic style. The results of the study indicate that the most prominent basic style was Related (Developer--27 percent; Missionary--15 percent), followed by Dedicated (Autocrat--15 percent; Benevolent Autocrat--6 percent); Integrated (Compromiser--13 percent; Executive--6 percent); and Separated (Deserter--15 percent; Bureaucrat--3 percent).

In studies involving teachers and trainers it was reported that the style most often scored was the Developer (Reddin, 1974). In the studies 40 individuals completed the test, 22 teachers and 18 trainers, and the results are listed in Table IV.

Reddin (1970) reported the results of the MSDT administered at two seminars attended by industrial relations managers. The 78 managers who attended the first seminar exhibited a leadership profile which included the Executive as the most prominent style with the Developer and Benevolent Autocrat reported as supporting styles. One year later 76 industrial relations managers attended a second seminar. The results of the MSDT administered to this group exhibited similar leadership style distribution. Although Reddin (1970) stated that "the similarity between the style distributions . . . attests to the reliability of the test on a group basis." (p. 248), this investigator believes that this information supports the validity of the instrument.

Test-retest reliability of the MSDT basic styles was reported by

Reddin (1974). A study which included 104 subjects in the United States, Canada, and the United Kingdom found reliability coefficients for basic styles ranging from 0.66 to 0.70. Somewhat lower coefficients (r = 0.45 to 0.59) were found in a similar study conducted using 57 participants who had not changed positions during the two-year time span between testing.

TABLE IV

MSDT LEADERSHIP STYLES OF SELECTED
TEACHERS AND TRAINERS
(N = 40)

Leadership Style	Percent	Basic Style	Percent
Developer	40.0%	Related	47.5%
Missionary	7.5%		
Executive	17.5%	Integrated	20%
Compromiser	2.5%		
Bureaucrat	10.0%	Separated	20%
Deserter	10.0%		
Benevolent Autocrat	10.0%	Dedicated	12.5%
Autocrat	2.5%		

The reliability of the MSDT in this study was estimated by applying the Kuder-Richardson Internal-Consistency Method (Ferguson, 1976, p. 428). Using the test scores of the 67 chairpersons, a reliability coefficient of 0.69 was computed.

Davies (1972) investigated the leadership styles of selected

policemen in the United Kingdom using the MSDT and the Blake and

Mouton Managerial Grid (1964). He concluded that:

> Viewed both individually and comparatively, the 3-D Theory
> (MSDT) appeared to produce a finer, and perhaps more cred-
> ible, analysis of each individual's dominant and supporting
> styles and his likely effectiveness with this kind of mix.
> Whereas the Blake Grid can hardly be said to have differ-
> entiated between the five accelerated promotion candidates
> in any significant way, the 3-D Theory (MSDT) suggested
> that candidates Nos. 2 and 4 may be the most suitable
> individuals for accelerated training and promotion within
> this particular organization. . . . these two candidates
> were eventually selected after extended interview . . .
> it may mean that the 3-D Theory (MSDT) can give a reliable
> guide to current managerial style as a component of
> selection. (p. 56).

Demographic Data Questionnaire

A Demographic Data Questionnaire was developed by the investi-

gator to collect individual and environmental information about the

participants. The specific variables included on the questionnaire

were title and discipline group of the division/department, number of

full-time employees supervised, years of experience in one's current

position, years of teaching experience, years of experience in edu-

cational administration, years of administrative experience outside

of education, sex, age, highest educational degree level, and number

of college credits in management or administrative education. A

copy of the questionnaire is found in Appendix A.

General Procedure

This study was designed to investigate the leadership styles of

division/department chairpersons in 12 Oklahoma state-supported two-

year colleges, using W. J. Reddin's Management Style Diagnosis Test

(MSDT). The study was also designed to identify selected personal characteristics of the chairpersons, determine if significant relationships exist between these characteristics and leadership styles; and determine if significant differences exist between chairpersons' leadership styles and chief academic officers' leadership styles.

The study began in September 1976 when contact was made with the chief academic officer of the colleges, who were told the purposes of the study and were asked to determine the feasibility of obtaining the necessary cooperation from their college and its leaders. Having received a very positive response, the investigator proceeded to obtain permission from Organizational Tests, Ltd., Fredericton, New Brunswick, Canada, to use the MSDT instrument. Data collection began in January, 1977, and was completed in February of the same year. The data were analyzed using the Statistical Package for Social Scientists (SPSS) on the Oklahoma State University computer.

Since the focus of this study was the division/department chairperson at the two-year colleges, the investigator conducted an interview with the chief academic officer at each college to determine if the position of division/department chairperson or its equivalent was included in the college organizational pattern. The interviews revealed that 12 of the 13 colleges did have individuals serving in the position as defined in this study. The organizational structure of the remaining college included a "management team" which reported directly to the president; the faculty reported directly to the chief academic officer with no intervening position. The 12 participating colleges are listed in Appendix B.

After the specific colleges to be included in the study were

identified, telephone contact was made with each of the 12 college
chief academic officers to discuss the study, to determine the number
of chairpersons to be included in the study, and to establish a date
for a campus visit. A letter was sent to each chief academic officer.
The purposes of the letter were to outline the purposes of the study,
specify the procedure for collecting the data, and confirm the sched-
uled date and time for the investigator to visit the campus to meet
with the participants and collect data. Copies of a brief description
of the study were included for distribution to the individual chair-
persons. The letter and the description are found in Appendix C.

Data Collection

Upon arriving at the college the investigator met with the chief
academic officer to review the study and to establish the exact pro-
cedure for collecting the data. At nine of the colleges, a group
meeting of all available chairpersons was held to discuss the details
of the study, the 3-D Theory of Managerial Effectiveness, and the in-
struments. Following the meeting, each individual was given a copy of
the MSDT and the Demographic Data Questionnaire and was asked to com-
plete both while the investigator waited. Approximately 50 percent of
the participants completed the instruments in this manner. Others,
usually because of conflicting time commitments, were unable to complete
them at that time but did so prior to the investigator's departure from
the campus. It was determined that at three colleges it would be best
to establish appointments for the investigator to visit with chair-
persons individually and administer the instruments.

In each case where the forms were completed in the investigator's

presence, the forms were reviewed to insure completeness prior to the investigator's departure from the college.

In those instances where a chairperson was not on campus, the investigator left with the chief academic officer specific instructions for completing the instruments and a copy of the instruments to be completed by the absent chairperson. In each case the forms were completed promptly and mailed to the investigator.

Research Hypotheses

Research hypotheses stemming from the major questions for investigation listed in Chapter I, page 6, were developed and tested.

The null hypotheses dealing with the questions are:

Hypothesis 1. There are no significant differences in the proportions of high leadership style dimension scores among division/department chairpersons of different academic discipline groups (Humanities, Science, Social Science, Applied Science, and Other).

Hypothesis 2. There is no significant difference in the leadership style dimension scores among division/department chairpersons of different ages.

Hypothesis 3. There is no significant difference in the leadership style dimension scores among division/department chairpersons with different lengths of professional experience.

Hypothesis 4. There is no significant difference in the leadership style dimension scores among division/department chairpersons with different amounts of formal education.

Hypothesis 5. There is no significant difference in the leadership style dimension scores among division/department chairpersons with different amounts of formal management education.

Hypothesis 6. There is no significant difference in leadership style dimension scores between division/department chairpersons based on sex.

Hypothesis 7. There is no significant difference in

leadership style dimension scores between division/depart-
ment chairpersons and chief academic officers.

Analysis of Data

The Management Style Diagnosis Test responses were scored in
accordance with the directions provided by Reddin (1972). Although
the specific steps for scoring the test are found in Appendix D, the
following brief description provides an overview of the process. The
choices made on each of the 64 paired statements are tallied and com-
bined to yield adjusted raw scores. The adjusted raw scores provide
the information necessary to determine an individual's Task Orienta-
tion, Relationships Orientation, Effectiveness, Leadership Style
Profile, and Leadership Style Synthesis.

The statistical procedures used to analyze the data were selected
as appropriate to the nature of the information and the purpose of the
study and are described in the Statistical Package for the Social
Sciences, 2nd Edition (Nie and others, 1975).

The first part of the data analysis, which tested hypothesis one,
involved the classification of each leadership style dimension into
high orientation and low orientation; that is, high T_O, low T_O;
high R_O, low R_O; and high E, low E. The classifications were based
upon Reddin's (1972) suggestion that individuals scoring 34 and above
on a selected dimension be considered to have demonstrated a high
orientation and those individuals scoring below 34 be considered to
be low. Each chairperson was assigned to one of the academic dis-
cipline groups based upon the information reported on his demographic
data sheet. The groups were Humanities, Science, Social Science,
Applied Science, Business, and Other. Since the situation for

testing the hypothesis involved the need to test the differences

among unordered groups; that is, academic discipline groups, with

regard to the observed frequency of assignment to a classification;

that is, high orientation or low orientation, the chi-square test

was selected to determine the significance of the differences

(McNemar, 1969). A 2 x 6 chi-square test was performed and the result-

ing χ^2 was tested at the 0.05 level of significance.

The approach used to test hypotheses two through five was to

identify and test the significance of between-groups variance.

Kerlinger (1964) stated that:

> Between-groups variance is the variance which reflects
> systematic differences between groups of measures.
> . . . The greater the difference between groups, the
> more an independent variable or variables can be pre-
> sumed to have operated. If there is no or little differ-
> ence between groups, on the other hand, then the pre-
> sumption must be that the independent variable or
> variables have not operated, that their effects are too
> weak to be noticed. (pp. 97-99).

The independent variables and strata groups associated with the

hypotheses are listed in Table V.

A series of one-way analyses of variance were performed to

determine the between-groups and within-groups variances of the Task

Orientation, Relationships Orientation, and Effectiveness scores for

each of the independent variables; F ratios were computed and tested

at the 0.05 level of significance to evaluate the significance of the

between-groups variance.

Hypothesis six was tested by grouping the chairpersons according

to sex as reported on the demographic data questionnaire; computing

the mean scores of each leadership dimension for each group; and

testing the significance of the differences in the means at the 0.05

TABLE V

INDEPENDENT VARIABLE GROUPS FOR
HYPOTHESES TWO THROUGH FIVE

Hypothesis Number	Independent variable	Groups
2	Age	35 or less years 36-45 years 46-55 years 56 or more years
3	Experience	
	- Years in Present Position	Less than 2 years 2-5 years 6-10 years 11-15 years 16 or more years
	- Years of Teaching	Less than 2 years 2-5 years 6-10 years 11-15 years 16-20 years 21 or more years
	- Years in Educational Administration	Less than 2 years 2-5 years 6-10 years 11-15 years 16 or more years

TABLE V (Continued)

Hypothesis Number	Independent Variable	Groups
	- Years of Administration Outside of Education	Less than 2 years 2-4 years 5 or more years
4	Highest Level of Education	Bachelors Masters Doctoral Coursework Complete Doctors
5	College Credits in Management or Educational Administration	0 credits 1-6 credits 7-12 credits 13-18 credits 19-24 credits 25 or more credits

level of significance using a two-tailed t-test (Ferguson, 1976).

Finally, to test hypothesis seven the mean scores for each leadership style dimension was computed for both the chairpersons and chief academic officers. The difference in the means was determined and the significance of this difference was tested using the two-tailed t-test at the 0.05 level of significance.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

The descriptive data collected for this study and the analysis of
the hypotheses stated in Chapter III are presented in this chapter.
The findings were based upon the Management Style Diagnosis Test
scores and the demographic data questionnaires completed by 67
division/department chairpersons and 12 chief academic officers in
Oklahoma state-supported two-year colleges. The respondents were
asked to enter on the demographic data sheet their age, number of
years for each type of experience, and the number of college credits
in management or educational administration. These responses were
used to assign individuals to ranges for the purposes of this study.
The other demographic data were used in the form provided by the
individual respondent.

Descriptive Data

Academic Discipline

Data provided by the chairpersons regarding their division/depart-
ment academic discipline group are displayed in Table VI.

The distribution of chairpersons by academic discipline group
reveals that 15 respondents headed Science divisions while 15 others

54

reported that Applied Science was their discipline group. Each of these groups represented 22.4 percent of the sample. There were 12 Humanities chairpersons or 17.9 percent and 10 Business division chairpersons representing 14.9 percent of the sample. Nine Social Science chairpersons represented 13.4 percent of the sample study. The "Other" group, which included divisions such as physical education, consisted of six respondents or 9.0 percent of the sample.

TABLE VI

DISTRIBUTION OF CHAIRPERSONS BY
ACADEMIC DISCIPLINE GROUP

Academic Discipline Group	Number	Percent of Sample
Science	15	22.4
Applied Science	15	22.4
Humanities	12	17.9
Business	10	14.9
Social Science	9	13.4
Other	6	9.0
TOTAL	67	100.0

Space was provided on the demographic data sheet for the chairpersons to name the division or department which they headed. This information provided a check for accuracy of the academic discipline group response and helped to insure the consistency of assignment to

academic discipline groups. Table VII shows the six academic discipline groups used in the study, along with the major academic disciplines included in each group.

TABLE VII

LISTING OF MAJOR ACADEMIC DISCIPLINES INCLUDED
IN THE ACADEMIC DISCIPLINE GROUPS

Academic Discipline Group	Academic Disciplines
Humanities	Fine Arts, Communications, Music, Languages
Science	Mathematics, Physical Science, Life Science, Engineering*
Social Science	Social Studies, Sociology, Government
Business	Business
Applied Science	Drafting, Agriculture, Nursing, Industrial Arts, Health
Other	Physical Education, Recreation

*In each college where engineering was being taught, it was included as part of a science dominated division. It was therefore included in the science group.

Age

Data provided by the chairpersons regarding their age are displayed in Table VIII.

When chairpersons were considered by age, it was found that the "35 or less" range and the "56 or more" range included the same number of people, with 12 respondents or 17.9 percent in each. The "36

to 45" range included the largest number of respondents with 24 chairpersons or 35.8 percent, and the "46 to 55" range contained 19 chairpersons (28.4 percent).

TABLE VIII

DISTRIBUTION OF CHAIRPERSONS BY AGE

Age Range	Number	Percent	
35 or Less years old	12	17.9	
36-45 years old	24	35.8	$\overline{x}$ = 45.1 yrs.
46-55 years old	19	28.4	Range = 29-64 yrs.
56 or More years old	12	17.9	
TOTAL	67	100.0	

Teaching Experience

Data provided by the chairpersons regarding their teaching experience are displayed in Table IX.

According to the data collected, over 70 percent of the chairpersons reported having more than 10 years of teaching experience. Three respondents, or 4.5 percent of the sample, reported having less than two years of teaching experience. The "2 to 5 years" range included eight chairpersons; the "6 to 10 years" range included nine chairpersons; the "11 to 15 years" range included 13 chairpersons; the "16 to 20 years" range contained 16 chairpersons; "more than 20

years" range included 18 chairpersons. These numbers represented 11.9, 14.3, 19.4, 23.4, and 26.9 percent of the sample respectively.

TABLE IX

DISTRIBUTION OF CHAIRPERSONS BY TOTAL YEARS
OF TEACHING EXPERIENCE

Years of Teaching	Number	Percent	
Less than 2 years	3	4.5	
2-5 years	8	11.9	
6-10 years	9	13.4	$\bar{x}$ = 15.9 yrs.
11-15 years	13	19.4	Range = 0-40 yrs.
16-20 years	16	23.9	
More than 20 years	18	26.9	
TOTAL	67	100.0	

Years in Current Position

Data provided by the chairpersons regarding their years of experience in the current position are displayed in Table X.

Eighteen chairpersons, or 26.9 percent of the sample, had less than two years experience in the current position while 22 (32.8 percent) chairpersons had two to five years experience. These two ranges included approximately 60 percent of the sample. The "6-10 years" range included nine chairpersons while the "11 to 15 years" range included eight, 13.4 and 11.0 percent respectively. The "more

than 15 years" range included 10 chairpersons or 15 percent of the
sample. It is interesting to note that while the mean number of
years reported was 7.6 years, approximately 60 percent of the respon-
dents had served in the position for five or less years.

TABLE X

DISTRIBUTION OF CHAIRPERSONS BY TOTAL YEARS
IN CURRENT POSITION

Years in Position	Number	Percent	
Less than 2 years	18	26.9	
2-5 years	22	32.8	
6-10 years	9	13.4	$\bar{x}$ = 7.6 yrs.
11-15 years	8	11.9	Range = 0.5-30 yrs.
More than 15 years	10	15.0	
TOTAL	67	100.0	

Years in Educational Administration

Data provided by the chairpersons regarding their years of
experience in educational administration, including their present
position, are displayed in Table XI.

Ten respondents reported that they had been educational adminis-
trators for less than two years, and 19 others reported that they
had two to five years of experience. These represent 14.9 and 28.4
percent respectively. The "6 to 10 years" range included 13 chair-

persons or 19.4 percent while "11 to 15 years" and "more than 15 years" ranges included 9 and 16 chairpersons or 13.4 and 23.9 percent respectively.

TABLE XI

DISTRIBUTION OF CHAIRPERSONS BY TOTAL YEARS
IN EDUCATIONAL ADMINISTRATION

Years In Educational Administration	Number	Percent	
Less than 2 years	10	14.9	
2-5 years	19	28.4	$\bar{x}$ = 8.4 yrs.
6-10 years	13	19.4	Range = 0.5-38.5 yrs.
11-15 years	9	13.4	
More than 15 years	16	23.9	
TOTAL	67	100.0	

When the mean of 8.4 years is compared with the mean numbers of years in the current position (7.6 years), it may be concluded that a large portion of chairperson's educational administrative experience has been obtained in their present position.

Administrative Experience in Non-Educational
Organizations

Data provided by the chairpersons regarding their years of administrative experience in non-educational organizations is displayed

in Table XII.

TABLE XII

DISTRIBUTION OF CHAIRPERSONS BY YEARS OF
ADMINISTRATIVE EXPERIENCE IN NON-
EDUCATIONAL ORGANIZATIONS

Years In Administration	Number	Percent	
Less than 2 years	44	65.7	
2-4 years	15	22.4	$\bar{x}$ = 1.5 yrs.
More than 4 years	8	11.9	Range = 0-15 yrs.
TOTAL	67	100.0	

Based upon the data shown in Table XII, it can be seen that chair-persons reported having rather limited administrative experience in non-educational organizations. Forty-four, or 65.7 percent of the chairpersons, indicated that they possessed less than two years of administrative experience in non-educational organizations. The "2 to 4 years" range included 15 chairpersons while the "more than 4 years" range included eight. These categories represent 22.4 and 11.9 percent respectively of the total sample.

Level of Education

Data provided by the chairpersons regarding their education is displayed in Table XIII.

TABLE XIII

DISTRIBUTION OF CHAIRPERSONS BY EDUCATIONAL LEVEL

Educational Level	Number	Percent
Less than Bachelors	0	0
Bachelors	2	3.0
Masters	47	70.2
Doctoral Course Work Complete	11	16.4
Doctors	7	10.4
TOTAL	67	100.0

When chairpersons were considered by highest level of education, it was found that most chairpersons hold the master's degree. This group included 47, or 70.2 percent of the sample. All of the respondents hold at least a bachelor's degree, with the degree being the highest for two chairpersons or three percent of the sample. Eleven chairpersons who reported having completed doctoral course work comprised 16.4 percent of the sample while seven chairpersons or 10.4 percent hold a doctoral degree.

Formal Management Education

Data provided by the chairpersons regarding the number of college credits completed in management or educational administration are displayed in Table XIV.

The distribution of college credits earned in management or educational administration revealed that approximately 50 percent of the

chairpersons who participated in this study had completed six or less

college credits in management or educational administration, with the

largest group of respondents stating they had zero credits; that is,

25 chairpersons or 37.3 percent of the sample. The "1 to 6" credits

group included nine chairpersons or 13.4 percent and the "7 to 12"

credits group included 12 chairpersons (17.9 percent). Eight chair-

persons reported that they had completed between 13 and 18 credits

while three others indicated having completed 19 to 24 credits. These

groups represent 11.9 and 4.5 percent, respectively, of the sample.

Ten chairpersons or 14.9 percent of the sample had completed 25 or

more credits in management or educational administration.

TABLE XIV

DISTRIBUTION OF CHAIRPERSON BY NUMBER OF
COLLEGE CREDITS EARNED IN MANAGEMENT
OR EDUCATIONAL ADMINISTRATION

Number of Credits	Number	Percent	
0	25	37.3	
1-6	9	13.4	$\bar{x}$ = 10.2 CH
7-12	12	17.9	Range = 0-45 CH
13-18	8	11.9	
19-24	3	4.5	
25 or more	10	14.9	
TOTAL	67	99.9	

<u>Sex</u>

The data provided by the chairpersons regarding their sex is displayed in Table XV.

TABLE XV   *ORIGAN*

DISTRIBUTION OF CHAIRPERSONS BY SEX

Sex	Number	Percent
Male	55	82.1
Female	<u>12</u>	<u>17.9</u>
TOTAL	67	100.0

The distribution of chairpersons by sex reveals that 55 male and 12 female chairpersons participated in the study. These numbers represent 82.1 and 17.9 percent respectively.

Description of Leadership Styles

In addition to providing data which can be used to analyze the hypotheses stated in Chapter III, the scores obtained from the Management Style Diagnosis Test may be combined to provide descriptive information which can be used to establish each individual's Leadership Style Profile and Style Synthesis.

The Leadership Style Profile is a quantitative description of the extent to which an individual is inclined toward each of the eight

leadership styles (see pages 13-14). The score for each style is de-
termined by summing the number of times an individual chooses a MSDT
statement which is descriptive of the style. The profile is, there-
fore, a set of eight numbers, ranging from 0 to 15, which quantita-
tively describe the extent to which each style is exhibited. Reddin
(1970) stated that the average score for any style is approximately
eight.

Table XVI presents the composite Leadership Style Profile for the
total sample. The Deserter Style mean score of 6.28 was the lowest;
the Developer Style mean of 9.90 was the highest.

TABLE XVI

MEAN SCORES, STANDARD DEVIATIONS, AND RANGES
FOR CHAIRPERSON LEADERSHIP STYLE PROFILE

Leadership Style Profile	Mean Score	S.D.	Standard Error of the Mean	Range
Developer	9.90	1.83	0.21	5.0-14.0
Missionary	9.63	1.80	0.20	5.0-13.0
Executive	7.30	1.64	0.19	2.0-11.0
Compromiser	9.24	1.55	0.17	6.0-14.0
Bureaucrat	8.55	1.57	0.18	5.0-12.0
Derserter	6.28	2.14	0.24	2.0-11.0
Benevolent Autocrat	7.36	2.06	0.23	3.0-13.0
Autocrat	7.70	1.85	0.21	3.0-11.0

Each style includes 67 scores

The Leadership Style Synthesis is the average leadership style and is based upon the individual's overall behavior (see page 12). It is determined by combining the Task Orientation, Relationships Orientation, and Effectiveness test scores as coordinates to identify a location on the three dimensional model (see page 11). The detailed procedure for determining style synthesis is included in Appendix D. Reddin (1970) in describing style synthesis stated:

> Because style synthesis is essentially an average, it can hide rather than reveal important elements in an individual manager's style behavior. Its particular usefullness lies in the description of an average manager in a particular organization. (p. 242).

The distribution of the chairpersons' Leadership Style Synthesis which is displayed in Table XVII provides an overall picture of the average leadership styles exhibited by the participating chairpersons.

An interesting observation is the comparison of the data displayed in Table XVII with Table IV, page 44. Although the percentages are not equal, the distributions of leadership styles are similar, and the basic styles for teachers and trainers (Table IV) appear in the same order of descending frequency as the chairpersons who participated in this study (Table XVII).

Both the Leadership Style Profile and Leadership Style Synthesis provide information which is helpful to the individual in reviewing his personal leader behavior. However, since these descriptive data were developed in terms of the three leader behavior dimensions; that is, Task Orientation, Relationships Orientation, and Effectiveness, it was decided to test the hypotheses with respect to the extent to which individuals exhibited each of the leader dimensions in their

pre-disposed behavior.

TABLE XVII

DISTRIBUTION OF CHAIRPERSONS'
LEADERSHIP STYLE SYNTHESES

Leadership Style Synthesis	Number	Percent	Basic Style	Number	Percent
Developer	19	28.3	Related	43	64.1
Missionary	24	35.8			
Executive	9	13.4	Integrated	15	22.4
Compromiser	6	9.0			
Bureaucrat	2	3.0	Separated	6	9.0
Deserter	4	6.0			
Benevolent Autocrat	1	1.5	Dedicated	3	4.5
Autocrat	2	3.0			

Analysis of the Hypotheses

Hypothesis 1

There are no significant differences in the proportions of high leadership style dimension scores among division/department chairpersons of different academic discipline groups (Humanities, Science, Social Science, Applied Science, Business, and Other).

Since individual leadership style scores are reported in terms of Task Orientation, Relationships Orientation, and Effectiveness

dimension scores, it was decided to construct three separate hypotheses
dealing with the proportions of high dimension scores with respect to
academic discipline group. The statement of each hypothesis is as
follows:

H_{1a}. There are no significant differences in the pro-
portions of high Task Orientation scores among division/
department chairpersons of different academic discipline
groups (Humanities, Science, Social Science, Applied
Science, Business, and Other).

H_{1b}. There are no significant differences in the pro-
portions of high Relationships Orientation scores among
division/department chairpersons of different academic
discipline groups (Humanities, Science, Social Science,
Applied Science, Business, and Other).

H_{1c}. There are no significant differences in the pro-
portions of high Effectiveness scores among division/
department chairpersons of different academic discipline
groups (Humanities, Science, Social Science, Applied
Science, Business, and Other).

Each of these hypotheses was tested to determine the significance
of the observed differences.

Hypothesis 1a. There are no significant differences in the pro-
portions of high Task Orientation scores among division/department
chairpersons of different academic discipline groups (Humanities,
Science, Social Science, Applied Science, Business, and Other).

To test this hypothesis each chairperson was assigned to one of
the six academic discipline groups (See Table VII, page 56) based upon
the information obtained through the demographic data questionnaire.
Within each group the MSDT Task Orientation scores were used to
classify each chairperson as either high Task or low Task oriented.
This classification was based upon Reddin's (1972) suggestion regard-
ing evaluation of the MSDT scores (see page 49). A 2 x 6 chi-square
analysis was performed, and the resulting contengency table is shown

in Table XVIII.

TABLE XVIII

2 x 6 CONTINGENCY TABLE FOR ACADEMIC DISCIPLINE
GROUPS BY TASK ORIENTATION

Count Row % Col % Tot %	Discipline						
	Humanities	Science	Social Science	Applied Science	Business	Other	Row Total
Low T_0	9 18.0 75.0 13.4	7 14.0 46.7 10.4	9 · 18.0 100.0 13.4	14 28.0 93.3 20.9	6 12.0 60.0 99.0	5 10.0 83.3 7.5	50 74.6
High T_0	3 17.6 25.0 4.5	8 47.1 53.5 11.9	0 0.0 0.0 0.0	1 5.9 6.7 1.5	4 23.5 40.0 6.0	1 5.9 16.7 1.5	17 25.4
Column Total	12 17.9	15 22.4	9 13.4	15 22.4	10 14.9	6 9.0	67 100.0

$\chi^2 = 13.396$ with d.f. = 5

The chi-square generated by the data is significant at the 0.05 level. The null hypothesis can be rejected, and the conclusion drawn that there is a significant difference in the proportion of high Task Orientation scores for division/department chairpersons of different academic discipline groups.

To determine the source of the demonstrated difference, paired combinations of discipline groups were extracted and one-tailed t-tests were performed to determine if the Task Orientation score means

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of the two were significantly different. Table XIX shows academic discipline group mean scores while the individual group pairs that were significantly different within their Task Orientation scores by academic discipline groups are shown in Table XX.

TABLE XIX

TASK ORIENTATION MEAN SCORES FOR CHAIRPERSONS
OF DIFFERENT ACADEMIC DISCIPLINE GROUPS

Discipline Group	N	Mean T_0 Score
Science	15	33.8
Business	10	32.6
Applied Science	15	31.4
Social Science	9	30.8
Humanities	12	30.0
Other	6	29.6

The Science academic discipline group chairpersons tended to score significantly higher on the Task Orientation dimension than did the Humanities, Social Science, Applied Science, and Other academic discipline groups. Business discipline group chairpersons tended to score significantly higher on the Task Orientation dimension than did the Humanities, Social Science, and Other discipline groups.

TABLE XX

SELECTED PAIRS OF ACADEMIC DISCIPLINE GROUPS
WITH SIGNIFICANT DIFFERENCES WITHIN TASK
ORIENTATION SCORES

Academic Discipline Grouping	Mean T_0	S.D.	t	d.f.	p
Science	33.8	3.82	2.60	25	0.01
Humanities	30.0	3.69			
Science	33.8	3.82	2.09	22	0.03
Social Science	30.8	2.43			
Science	33.8	3.82	2.20	28	0.02
Applied Science	31.4	1.76			
Science	33.8	3.82	2.53	19	0.01
Other	29.6	1.96			
Business	32.6	2.17	2.95	20	0.005
Humanities	30.0	1.96			
Business	32.6	2.17	1.74	17	0.05
Social Science	30.8	2.43			
Business	32.6	2.17	2.76	14	0.01
Other	29.6	1.96			

Hypothesis 1b. There are no significant differences in the pro-
portions of high Relationship Orientation scores among division/
department chairpersons of different academic discipline groups
(Humanities, Science, Social Science, Applied Science, Business, and
Other).

This hypothesis was tested in the same manner described for

testing Hypothesis 1a. The respondents were assigned to one of the six academic discipline groups based upon the information obtained through the demographic data questionnaire. Within these groups the MSDT Relationships Orientation scores were used to classify each chairperson as either high relationships or low relationships oriented. The classification criterion used was that those chairpersons who scored 34 and above on the Relationships Orientation dimension were considered to have demonstrated high Relationships Orientation, while others were considered low relationships (see page 49). A 2 x 6 chi-square analysis was performed (see Appendix E) and the calculated value (χ^2 = 2.38, d.f. = 5) was found not to be significant at the 0.05 level of significance. Therefore, the hypothesis that there are no significant differences in the proportions of high Relationships Orientation scores among division/department chairpersons of different academic discipline groups cannot be rejected.

Hypothesis 1c. There are no significant differences in the proportions of high Effectiveness scores among division/department chairpersons of different academic discipline groups (Humanities, Science, Social Science, Applied Science, Business, and Other).

This hypothesis was tested in a manner similar to the procedure used to test hypotheses 1a and 1b. The chairpersons were assigned to one of the six academic discipline groups based upon information obtained from the demographic data questionnaire. Within each group the MSDT Effectiveness dimension score was used to classify each chairperson as high or low in Effectiveness dimension. The criterion established for the classification was a score of 34 or above to be considered high and below 34 considered low (see page 49). A 2 x 6

chi-square analysis was completed (see Appendix E) and the results supported the acceptance of the null hypothesis (χ^2 = 0.45, d.f. = 5) at the 0.05 level of significance. Based upon the data, no significant differences in the proportion of high Effectiveness dimension scores among division/department chairpersons of different academic discipline groups was found.

Hypothesis 2

There is no significant difference in leadership style dimension scores among division/department chairpersons of different ages.

Since individual leadership style is determined by the combination of the Task Orientation, Relationships Orientation, and Effectiveness dimensions, it was decided to construct three separate hypotheses dealing with the variance found in each dimension with respect to age. The statement of each hypothesis is as follows:

H_{2a}. There is no significant difference in Task Orientation scores among division/department chairpersons of different ages.

H_{2b}. There is no significant difference in Relationships Orientation scores among division/department chairpersons of different ages.

H_{2c}. There is no significant difference in Effectiveness scores among division/department chairpersons of different ages.

The chairpersons were assigned to one of four groups according to reported age. The groups were: "35 or less years old", "36-45 years old", "46-55 years old", and "56 or more years old". The distribution of chairpersons by age is shown in Table VIII, page 57.

In order to test the hypotheses (H_{2a}, H_{2b}, and H_{2c}), a one-way analysis of variance was completed for the age groups for Task

Orientation scores and then repeated for both Relationships Orienta-

tion scores and Effectiveness scores. The output generated for these

analyses were tested at a 0.05 significance level. The results showed

no significant difference between chairpersons of different ages in

their Task Orientation scores (F = 0.049, d.f. = 3/63), Relationships

Orientation scores (F = 0.736, d.f. = 3/63) or Effectiveness scores

(F = 0.489, d.f. = 3.63).

The null hypotheses (H_{2a}, H_{2b}, and H_{2c}); that is, that there are

no significant differences in Task Orientation scores, Relationships

Orientation scores, or Effectiveness scores among chairpersons of ·

different ages, was not rejected.

Hypothesis 3

There is no significant difference in leadership style dimension

scores among division/department chairpersons having different lengths

of professional experience.

"Experience" was divided into four subcategories: experience in

the current position; experience in educational administration; ex-

perience in teaching; and administrative experience in non-educational

organizations. These subcategories were then stratified by number of

years of experience, and the chairpersons were assigned to a specific

stratum based upon the responses provided on the demographic data

questionnaire. The strata for each of the categories correspond to

the distributions shown in Tables IX through XII, pages 58-61. Since

these four types of professional experience were to be investigated

and since leadership styles are determined by the combination of the

Task Orientation, Relationships Orientation, and Effectiveness scores,

it was decided to construct and test 12 separate hypotheses. State-

ments of the hypotheses dealing with experience in the current posi-

tion are:

H$_{3a}$. There is no significant difference in Task Orienta-
tion scores among division/department chairpersons with
different amounts of experience in the current position.

H$_{3b}$. There is no significant difference in Relationships
Orientation scores among division/department chairpersons
with different amounts of experience in the current posi-
tion.

H$_{3c}$. There is no significant difference in the Effective-
ness scores among division/department chairpersons with
different amounts of experience in the current position.

Statements of the hypotheses dealing with experience in educational

administration are:

H$_{3d}$. There is no significant difference in the Task
Orientation scores among division/department chairpersons
with different amounts of experience in educational
administration.

H$_{3e}$. There is no significant difference in the Relation-
ships Orientation scores among division/department
chairpersons with different amounts of experience in
educational administration.

H$_{3f}$. There is no significant difference in the Effec-
tiveness scores among division/department chairpersons
with different amounts of experience in educational
administration.

Statements of the hypotheses dealing with experience in teaching

are:

H$_{3g}$. There is no significant difference in the Task
Orientation scores among division/department chairper-
sons with different amounts of teaching experience.

H$_{3h}$. There is no significant difference in the Relation-
ships Orientation scores among division/department
chairpersons with different amounts of teaching experience.

H$_{3i}$. There is no significant difference in Effectiveness
scores among division/department chairpersons with dif-
ferent amounts of teaching experience.

Statements of the hypotheses dealing with administrative experience

in non-educational organizations are:

H_{3j}. There is no significant difference in Task Orientation scores among division/department chairpersons with different amounts of administrative experience in non-educational organizations.

H_{3k}. There is no significant difference in Relationships Orientation scores among division/department chairpersons with different amounts of administrative experience in non-educational organizations.

$H_{3\ell}$. There is no significant difference in Effectiveness scores among division/department chairpersons with different amounts of administrative experience in non-educational organizations.

The one-way analysis of variance performed for each of the variables resulted in 12 different analysis-of-variance tables. Each of the computed F-values was tested at the 0.05 level of significance. Due to the volume of output, only those analyses which produced F-values which were found to be significant are listed. These analyses which were found to be significant are found in Tables XXI through XXXI. The analyses which were found to not be significant are displayed in Appendix F.

Based upon the data shown in Table XXI, the null hypothesis (H_{3h})--that there is no significant difference in the Relationships Orientation scores among division/department chairpersons with different amounts of teaching experience--can be rejected.

The data displayed in Table XXII support the rejection of null hypothesis H_{3i}--that there is no significant difference in the Effectiveness scores among division/department chairpersons with different amounts of teaching experience.

Based upon the data shown in Table XXIII, the null hypothesis $(H_{3\ell})$--that there is no significant difference in the Effectiveness scores among division/department chairpersons with different amounts

of administrative experience in non-educational organizations--can be
rejected.

TABLE XXI

SUMMARY OF ANOVA FOR EFFECT OF TEACHING
EXPERIENCE ON RELATIONSHIPS
ORIENTATION SCORES

Source of Variation	S.S.	d.f.	M.S.	F	Significance of F
Teaching Experience	116.725	5	23.345	3.194	0.014
Residual	445.874	61	7.309		
TOTAL	562.599	66			

TABLE XXII

SUMMARY OF ANOVA FOR EFFECT OF TEACHING
EXPERIENCE ON EFFECTIVENESS SCORES

Source of Variation	S.S.	d.f.	M.S.	F	Significance of F
Teaching Experience	64.100	5	12.82	2.37	0.050
Residual	330.166	61	5.41		
TOTAL	394.266	66			

TABLE XXIII

SUMMARY OF ANOVA FOR EFFECT OF ADMINISTRATIVE
EXPERIENCE IN NON-EDUCATIONAL ORGANIZATIONS
ON EFFECTIVENESS SCORES

Source of Variation	S.S.	d.f.	M.S.	F	Significance of F
Administrative Experience in Non-Educational Organizations	60.363	2	30.181	5.785	0.005
Residual	333.903	64	5.217		
TOTAL	394.266	66			

The data presented in Tables XXI through XXIII, pages 77-78, indicate that there were significant differences in certain leadership style scores of chairpersons with different amounts of certain types of professional experience. However, since the analyses of variance did not show where the demonstrated differences existed, the various combinations of strata within each type of professional experience were compared using one-tailed t-tests to determine if the strata mean scores were significantly different.

The mean Relationships Orientation scores for the various strata of teaching experience are shown in Table XXIV. Table XXV shows the individual strata pairs where a significant difference existed within chairperson Relationships Orientation scores by amount of teaching experience.

After reviewing the Relationships Orientation mean scores shown

in Table XXIV, it was noted that the strata groups with 10 or less years of teaching experience; that is, "Less than 2 years", "2-5 years", and "6-10 years", showed mean scores which tended to be less than the strata groups with more than 10 years of teaching experience; that is, "11-15 years", "16-20 years", and "21 or more years". To test the significance of this difference the strata groups were re-defined as "10 or less years" and "more than 10 years" of teaching experience, the mean scores for the groups were calculated and a t-test was completed to determine the significance of the difference in the mean scores. Table XXVI relates the mean score, t-value, and level of significance for this pair.

TABLE XXIV

RELATIONSHIPS ORIENTATION MEAN SCORES FOR
CHAIRPERSONS WITH DIFFERENT AMOUNTS
OF TEACHING EXPERIENCE

Years of Teaching Experience	Number	Mean R_O Score
Less than 2 years	3	34.3
2-5 years	8	35.7
6-10 years	9	33.8
11-15 years	13	36.9
16-20 years	16	37.4
More than 20 years	18	37.9

TABLE XXV

SELECTED PAIR OF TEACHING EXPERIENCE GROUPS WITH
SIGNIFICANT DIFFERENCES WITHIN RELATIONSHIPS
ORIENTATION SCORES

Teaching Experience Group	Mean	S.D.	t	d.f.	p
More than 20 years	37.9	3.13	3.25	25	0.003
6-10 years	33.8	2.99			

TABLE XXVI

COMPARISON OF MEAN RELATIONSHIPS ORIENTATION
SCORES OF CHAIRPERSONS WITH TEN OR LESS
YEARS OF TEACHING EXPERIENCE AND
CHAIRPERSONS WITH MORE THAN
TEN YEARS OF TEACHING
EXPERIENCE

Years of Teaching Experience	N	Mean R_0 Score	S.D.	t	d.f.	p
10 or less years	20	34.6	3.17	3.85	65	0.005
More than 10 years	47	37.7	2.94			

Chairpersons with more than 10 years of teaching experience demonstrated significantly higher Relationships Orientation dimension than those who reported having 10 or less years of teaching experience.

The analysis of variance of Effectiveness scores by amount of

teaching experience demonstrated that differences exist among the strata. To identify the specific strata which differ significantly, the mean score of each strata was compared with every other and a t-test was completed for each pair to determine if the strata mean scores were significantly different. The Effectiveness mean scores for the various strata of teaching experience are shown in Table XXVII. The individual strata pairs where significant differences were demonstrated within chairperson Effectiveness scores by amount of teaching experience are shown in Table XXVIII.

TABLE XXVII

EFFECTIVENESS MEAN SCORES FOR CHAIRPERSONS WITH
DIFFERENT AMOUNTS OF TEACHING EXPERIENCE

Years of Teaching Experience	Number	Mean E Score
Less than 2 years	3	32.0
2-5 years	8	32.2
6-10 years	9	32.9
11-15 years	13	34.6
16-20 years	16	35.8
More than 20 years	18	35.6

TABLE XXVIII

SELECTED PAIRS OF TEACHING EXPERIENCE GROUPS
WITH SIGNIFICANT DIFFERENCES WITHIN
EFFECTIVENESS SCORES

Teaching Experience Group	Mean	S.D.	t	d.f.	p
More than 20 years	35.6	2.94	2.47	25	0.01
6-10 years	32.9	1.95			
16-20 years	35.8	3.01	2.44	22	0.015
2-5 years	32.2	4.13			
16-20 years	35.8	3.01	2.59	23	0.01
6-10 years	32.9	1.95			

A review of the Effectiveness mean scores shown in Table XXVII, page 81, seemed to indicate that the chairperson groups with 10 or less years of teaching experience; that is, "Less than 2 years", "2-5 years", and "6-10 years" had somewhat lower Effectiveness scores than those with more than 10 years; that is, "11-15 years", "16-20 years", and "More than 20 years". The significance of this difference was tested by grouping the chairpersons into two groups by teaching experience; that is, "10 or less years" and "More than 10 years", computing the mean scores for each group, and completing a t-test to determine the significance of difference in the mean scores. Table XXIX relates the mean scores, t-value, and level of significance for this pair. The "More than 10 years" teaching experience group tended to score significantly higher Effectiveness scores than those with less teaching experience.

TABLE XXIX

COMPARISON OF MEAN EFFECTIVENESS SCORES OF
CHAIRPERSONS WITH TEN OR LESS YEARS OF
TEACHING EXPERIENCE AND CHAIRPERSONS
WITH MORE THAN TEN YEARS OF
TEACHING EXPERIENCE

Years of Teaching Experience	N	Mean E Score	S.D.	t	d.f.	p
10 or less years	20	32.5	2.97	3.69	65	0.005
More than 10 years	47	35.4	2.93			

The analysis of variance performed to investigate the significance of the differences in Effectiveness scores among chairpersons with different amounts of administrative experience in non-educational organizations found that there were significant differences. However, to identify the individual groups which differed significantly, the mean scores for each group were compared with every other group mean score. A t-value was computed for each pair and tested to determine the level of significance. Table XXX shows the mean scores of the different administrative experience in non-educational organizations while the t-value and level of significance for pairs of strata which were found to significantly differ are listed in Table XXXI.

The "More than 4 years" of administrative experience in non-educational organizations tended to score significantly higher on the Effectiveness dimension than those with less administrative experience in non-educational organizations.

TABLE XXX

EFFECTIVENESS MEAN SCORES FOR CHAIRPERSONS WITH
DIFFERENT AMOUNTS OF ADMINISTRATIVE EXPERIENCE
IN NON-EDUCATIONAL ORGANIZATIONS

Years of Outside Administration	N	Mean E Score
Less than 2 years	44	32.3
2-4 years	15	32.8
More than 4 years	8	35.0

TABLE XXXI

SELECTED PAIRS OF NON-EDUCATIONAL ADMINISTRATION
EXPERIENCE GROUPS WITH SIGNIFICANT DIFFERENCES
WITHIN EFFECTIVENESS SCORES

Outside Administration Experience	Mean	S.D.	t	d.f.	p
More than 4 years	35.0	3.42	2.87	50	0.005
Less than 2 years	32.2	2.37			
More than 4 years	35.0	3.42	2.0	21	0.003
2-4 years	32.8	1.91			

Hypothesis 4

There is no significant difference in leadership style scores among division/department chairpersons with different amounts of formal education. Because this hypothesis presented individual

questions concerning the three dimensions of leadership style,

separate hypotheses were developed for testing. The hypotheses are:

H_4a. There is no significant difference in Task Orienta-
tion scores among division/department chairpersons with
different amounts of formal education.

H_4b. There is no significant difference in Relationships
Orientation scores among division/department chairpersons
with different amounts of formal education.

H_4c. There is no significant difference in Effectiveness
scores among division/department chairpersons with dif-
ferent amounts of formal education.

Using the educational level groups shown in Table XIII, page 62, as

independent variable, a one-way analysis of variance was completed

for Task Orientation scores and then repeated again for Relationships

Orientation scores and Effectiveness scores. The educational level

groups were bachelor's degree, master's degree, doctoral course work

completed, and doctor's degree.

The results of the analyses of variance were tested at the 0.05

level of significance, and the tests indicated that two null hypothe-

sis, H_4a and H_4b, could not be rejected, for the differences found

among Task Orientation scores (F = 0.598, d.f. = 3.63) and Relation-

ships Orientation scores (F = 0.398, d.f. = 3/63) by level of

education were not significant. The differences observed in the

Effectiveness scores were found to be significant, and Hypothesis 4c

was rejected. Table XXXII shows the analysis of variance table for

Effectiveness scores by educational level. There is a significant

difference in Effectiveness scores among division/department chair-

persons with varying educational levels.

To investigate the significance of the differences between in-

dividual groups of chairpersons with different amounts of formal

education, a t-test was performed on each paired combination of groups. Table XXXIII shows the Effectiveness mean scores for each of the groups while Table XXXIV shows the individual pairs that were significantly different within their Effectiveness scores by level of education.

TABLE XXXII

SUMMARY OF ANOVA FOR EFFECT OF LEVEL OF EDUCATION
ON EFFECTIVENESS SCORES

Source of Variance	.S.S.	d.f.	M.S.	F	Significance of F
Educational Level	45.656	3	15.219	3.125	0.034
Residual	306.810	63	4.870		
TOTAL	352.466	66			

TABLE XXXIII

EFFECTIVENESS MEAN SCORES FOR CHAIRPERSONS WITH
DIFFERENT LEVELS OF EDUCATION

Educational Level	Number	Mean E Score
Bachelor's	2	35.5
Master's	47	32.6
Doctoral Course Work Complete	11	34.8
Doctor's	7	35.6

TABLE XXXIV

SELECTED PAIRS OF EDUCATIONAL LEVEL GROUPS
WITH SIGNIFICANT DIFFERENCES WITHIN
EFFECTIVENESS SCORES

Educational Level Group	Mean	S.D.	t	d.f.	p
Doctor's	35.6	2.17	2.97	52	0.005
Master's	32.6	2.54			
Doctoral Course Work Complete	34.8	2.78	2.54	56	0.007
Master's	32.6	2.54			

The findings shown in Table XXXIV indicate that chairpersons who hold the doctor's degree or who have completed doctoral course work tend to score significantly higher on the Effectiveness dimension than those chairpersons with just a master's degree. To further test the observed differences in Effectiveness dimension scores with respect to level of education, the chairpersons were grouped into two different groups according to educational level; that is, "Doctor's Degree and Doctoral Course Work Complete" and "Bachelor's and Master's" degrees. A t-test was completed to test the significance of the difference in Effectiveness mean scores between these groups. Table XXXV shows the group mean scores, the t-value, and the level of significance associated with the difference between these two groups. Chairpersons who held the doctor's degree or who had completed doctoral course work tended to score significantly higher on the Effectiveness dimension than those who had only the bachelor's and master's degree.

TABLE XXXV

COMPARISON OF MEAN EFFECTIVENESS SCORES OF CHAIR-
PERSONS WITH DOCTOR'S DEGREE OR DOCTORAL
COURSE WORK COMPLETED AND THOSE WITH
ONLY BACHELOR'S OR MASTER'S
DEGREES

Level of Education	N	Mean E Score	S.D.	t	d.f.	p
Doctor's Degree or Doctoral Course Work Complete	18	35.1	2.63	3.43	65	0.005
Bachelor's or Master's Degree Only	49	32.7	2.49			

Hypothesis 5

There is no significant difference in the leadership style scores among division/department chairpersons with different amounts of formal management education.

This hypothesis was divided into three separate hypotheses dealing with a dimension of leadership style: Task Orientation, Relationships Orientation, and Effectiveness. The statement of the hypotheses is as follows:

H_{5a}. There is no significant difference in the Task Orientation scores among division/department chairpersons with different amounts of college credits in management or educational administration.

H_{5b}. There is no significant difference in the Relationships Orientation scores among division/department chairpersons with different amounts of college credits in management or educational administration.

H_{5c}. There is no significant difference in the Effectiveness scores among division/department chairpersons with different amounts of college credits in management or educational administration.

A one-way analysis of variance was performed for each hypothesis, H_{5a} through H_{5c}, and produced F-values which were tested at the 0.05 level of significance. The F-values and levels of significance are displayed in Table XXXVI.

TABLE XXXVI

SUMMARY OF ANOVA FOR EFFECT OF NUMBER OF COLLEGE
CREDITS IN MANAGEMENT OR EDUCATIONAL
ADMINISTRATION ON LEADERSHIP STYLE
DIMENSION SCORES

Dimension	M.S.	d.f.	F	Significance of F
Task Orientation	9.759	5/61	1.024	0.412
Relationships Orientation	12.770	5/61	1.441	0.222
Effectiveness	4.926	5/61	0.813	0.999

No significant difference was found in Task Orientation, Relationships Orientation, or Effectiveness scores of division/department chairpersons with varying amounts of college credit in management or educational administration.

Hypothesis 6

There is no significant difference in the leadership style

dimension scores between division/department chairpersons based on sex.

This hypothesis was divided into three separate hypotheses dealing with a dimension of leadership style: Task Orientation, Relationships Orientation, and Effectiveness. The hypotheses are:

H_{6a}. There is no significant difference in the Task Orientation scores between division/department chairpersons based on sex.

H_{6b}. There is no significant difference in Relationships Orientation scores between division/department chairpersons based on sex.

H_{6c}. There is no significant difference in Effectiveness scores between division/department chairpersons based on sex.

Each of these hypotheses was tested to determine the significance of the observed differences.

Hypothesis 6a. There is no significant difference in the Task Orientation scores between division/department chairpersons based on sex.

The testing of this hypothesis was accomplished by completing a t-test to determine the significance of the difference between the mean Task Orientation scores of male and female chairpersons. The output for this test included the t-statistic which was tested for significance at the 0.05 level of significance, and it was found that the difference between the groups was not significant. Therefore, the null hypothesis--that there is no difference in Task Orientation scores between division/department chairpersons based on sex--was not rejected. Table XXXVII displays the t-statistic and the level of significance.

Hypothesis 6b. There is no significant difference in Relationships Orientation scores between division/department chairpersons based

on sex.

TABLE XXXVII

COMPARISON OF MEAN TASK ORIENTATION SCORES
OF MALE AND FEMALE CHAIRPERSONS

Sex	N	Mean	S.D.	t	d.f.	p
Male	55	31.400	3.247			
				-1.21	65	0.232
Female	12	32.583	2.065			

Using the approach which was employed to test Hypothesis 6a, the Relationships Orientation scores were compared using the t-test of differences between means. A two-tailed test at the 0.05 level of significance was used since the stated hypothesis dealt with non-directional differences. The output for the t-test are presented in Table XXXVIII.

TABLE XXXVIII

COMPARISON OF MEAN RELATIONSHIPS ORIENTATION
SCORES OF MALE AND FEMALE CHAIRPERSONS

Sex	N	Mean	S.D.	t	d.f.	p
Male	55	36.018	3.136			
				-0.42	65	0.747
Female	12	36.333	2.570			

No significant difference between the means was found and, therefore, the null hypothesis--that there is no significant difference in Relationships Orientation scores between division/department chairpersons based on sex--was not rejected.

Hypothesis 6c. There is no significant difference in Effectiveness scores between division/department chairpersons based on sex.

The mean scores of the two groups were compared and tested for significance of difference. The results of the two-tailed t-test are displayed in Table XXXIX. No significant difference was found at the 0.05 level of significance. Therefore, the null hypothesis--that there is no significant difference in Effectiveness scores of division/department chairpersons based on sex--was not rejected.

TABLE XXXIX

COMPARISON OF MEAN EFFECTIVENESS SCORES
OF MALE AND FEMALE CHAIRPERSONS

Sex	N	Mean	S.D.	t	d.f.	p
Male	55	32.964	2.449	-1.01	65	0.316
Female	12	33.75	2.417			

Having tested the hypotheses concerning differences among chairpersons, the focus of the study was directed toward evaluating the differences in leadership style dimension scores between chairpersons and their

superordinates--the chief academic officers. Hypothesis seven, therefore, dealt with differences in Task Orientation scores, Relationships Orientation scores, and Effectiveness scores between two groups of individuals--division/department chairpersons and chief academic officers.

Hypothesis 7

There is no significant difference in leadership style dimension scores between division/department chairpersons and chief academic officers.

This hypothesis was divided into three separate hypotheses. The hypotheses, which were developed to investigate the observed differences in each of three dimensions of leadership, are as follows:

H_{7a}. There is no significant difference between the Task Orientation scores of division/department chairpersons and chief academic officers.

H_{7b}. There is no significant difference between the Relationships Orientation scores of division/department chairpersons and chief academic officer.

H_{7c}. There is no significant difference between the Effectiveness scores of division/department chairpersons and chief academic officers.

These hypotheses were tested to determine the significance of the observed differences in mean scores.

Hypothesis 7a. There is no significant difference between Task Orientation scores of division/department chairpersons and chief academic officers.

This hypothesis was tested by first computing the mean Task Orientation scores for the two groups--chairpersons and chief

academic officers. The significance of the difference between the two means was tested at the 0.05 level using the t-test of significance.

The output from the t-test of the data is displayed in Table XXXX.

TABLE XXXX

COMPARISON OF MEAN TASK ORIENTATION SCORES OF
CHAIRPERSONS AND CHIEF ACADEMIC OFFICERS

Group	N	Mean	S.D.	t	d.f.	p
Chief Academic Officers	12	33.000	2.558	1.47	77	0.147
Chairpersons	67	31.612	3.089			

Although the mean score of the participating chief academic officers (33.00) was higher than the mean score of the chairpersons (31.61), the results of the t-test did not permit the rejection of the null hypothesis--that there is no significant difference between the Task Orientation scores of division/department chairpersons and chief academic officers.

Hypothesis 7b. There is no significant difference between the Relationships Orientation scores of division/department chairpersons and chief academic officers.

The t-test of difference between independent means was performed to test the significance of observed differences in Relationships Orientation scores of chairpersons and chief academic

officers. The test revealed that the difference in means was not

significant at the 0.05 level of significance. The null hypothesis

was not rejected, and the Relationships Orientation scores of the

chairpersons and chief academic officers were not found to be

statistically different. Table XXXXI shows the output from the t-

test.

TABLE XXXXI

COMPARISON OF THE MEAN RELATIONSHIPS ORIENTATION
SCORES OF CHAIRPERSONS AND CHIEF
ACADEMIC OFFICERS

Group	N	Mean	S.D.	t	d.f.	p
Chief Academic Officers	12	37.333	2.498	1.36	77	0.178
Chairpersons	67	36.075	3.027			

Hypothesis 7c. There is no significant difference between

Effectiveness scores of division/department chairpersons and chief

academic officers.

This hypothesis was analyzed in the manner similar to that used

in testing Hypothesis 7a and 7b; that is, a t-test was applied to test

the significance of the difference between the computed means of

Effectiveness scores of chairpersons and chief academic officers.

The output of the t-test is displayed in Table XXXXII.

Based upon the data displayed in Table XXXXII the null hypothe-

sis--that there is no significant difference in Effectiveness scores

of division/department chairpersons and chief academic officers--cannot be rejected.

TABLE XXXXII

COMPARISON OF MEAN EFFECTIVENESS SCORES OF
CHAIRPERSONS AND CHIEF ACADEMIC OFFICERS

Group	N	Mean	S.D.	t	d.f.	p
Chief Academic Officer	12	34.000	2.089			
				1.19	77	0.237
Chairpersons	67	33.104	2.444			

Test for Homogeneity of Variance

The analyses of the hypotheses using the t-test and one-way analysis of variance were based upon the assumption that the scores in each of the various groups have approximately the same variance (Roscoe, 1975). To test this assumption a test for homogeneity of variance, Cochran C Test, was completed for each case with the results indicating that homogeneous variance among groups existed. Although the Cochran Test for homogeneity of variances assumes equal number of observations within each group, Roscoe (1975) stated that: "For most behavioral science applications, the Cochran C test appears to provide a reasonable approximation for unequal sample sizes if 'n' is taken to be the average sample size." (p. 290). Therefore, the average number of observations for each group was used to determine the critical values for C.

The results of the Cochran test for each case where the null hypothesis was rejected are displayed in Appendix G.

Summary

The findings presented in this chapter include descriptive information concerning selected personal characteristics and leadership styles of chairpersons as well as the statistical testing of the hypotheses which were developed to identify significant differences between reported leadership dimensions based upon selected factors.

The average age of the chairpersons who participated in the study was 45 years, and the reported ages ranged from 29 to 64 years.

The chairpersons reported having significant teaching experience; the average was approximately 16 years. The majority of the participants (60 percent) had served in their current position for five or less years, with the average length of service being 7.6 years. When this average length of service is compared with the average total years in educational administration (8.4 years), it may be seen that much of the chairpersons' educational administrative experience has been gained in the current position. Administrative experience in non-educational organizations is rather limited since approximately 66 percent of the 67 chairpersons reported having less than two years experience.

Seventy percent or 47 of the chairpersons held the master's degree, and seven held the doctor's degree. Another aspect of formal education which was reported showed that slightly over 50 percent or 34 chairpersons had completed six or less college credits in management or educational administration.

A great majority of the 67 participating chairpersons, 82 percent, were male.

The most prominent basic leadership style syntheses scored by the chairpersons (43 of 67) was the Related basic style; 4.5 percent of the chairpersons analyzed demonstrated the Dedicated basic style.

The statistical hypotheses were analyzed and the findings were as follows:

1. Significant differences in Task Orientation scores were identified among chairpersons of different academic discipline groups.

    --The Science academic discipline group tended to score significantly higher on the Task Orientation dimension than did the Humanities, Social Science, Applied Science, and Other academic discipline groups.

    --The Business academic discipline group tended to score significantly higher on the Task Orientation dimension than did the Humanities, Social Science, and Other academic discipline groups.

2. Significant differences in Relationships Orientation were identified among chairpersons with different amounts of teaching experience.

    --Chairpersons with more than 10 years of teaching experience tended to score significantly higher on the Relationships Orientation dimension than those with less teaching experience.

3. Significant differences in Effectiveness scores were identified among chairpersons with different amounts of teaching experience.

    --Chairpersons with more than 10 years of teaching experience tended to score significantly higher on the Effectiveness dimension than those with less teaching experience.

4. Significant differences in Effectiveness scores were identified among chairpersons with different amounts of administrative experience in non-educational organizations.

    --Chairpersons with more than four years of administrative experience in non-educational organizations tended to score significantly higher on the Effectiveness dimension than those with less adminis-

trative experience in non-educational organi-
zations.

5. Significant differences in Effectiveness scores were
    identified among chairpersons with different levels
    of education.

    --Chairpersons who held the doctor's degree or who
    had completed doctoral course work tended to score
    significantly higher on the Effectiveness dimension
    than those who had only the bachelor's degree or
    master's degree.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study focused on leadership styles of division/department chairpersons and chief academic officers in Oklahoma state-supported two-year colleges. The study was based upon the 3-D Theory of Managerial Effectiveness, and it employed the Management Style Diagnosis Test to determine individual leadership style dimension scores (Reddin, 1970; Reddin, 1972). The primary purpose of the study was to develop information which may help college administrators understand the leadership behavior of chairpersons better.

The 12 state-supported two-year colleges whose organizational staffing pattern included the position of chairperson, as defined in this study, were visited by the investigator. During these visits individual chairpersons and chief academic officers were asked to participate in the study by completing the Management Style Diagnosis Test and the Demographic Data Questionnaire. Sixty-seven chairpersons and 12 chief academic officers chose to participate and were included in the study. The tests were tallied and scores for each of the three leadership dimensions were computed. The information provided on the questionnaire was used to group the participants, to stratify the groups for the analysis of the leadership data, and to provide base-line data for future studies. Using the three leadership style

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dimensions of Task Orientation, Relationships Orientation, and Effectiveness as the dependent variables, the observed differences between identified strata of selected independent variables were analyzed. The independent variables were: academic discipline group, age, professional experience, educational level, management education, and sex. The observed differences between division/department chairpersons and chief academic officers on the three leadership style dimensions were also analyzed.

The basic statistical approach employed in the study was to locate and measure the significance of differences among the various groups of participants on the three leadership style dimensions. Five statistically significant differences were identified, indicating that real differences existed within the associated variables.

The analysis of differences among academic discipline groups found a significant difference in degree of Task Orientation among the groups. Chi-square analysis indicated that significant differences exist among the categories: Humanities, Social Science, Applied Science, Science, Business, and Others academic discipline groups (χ^2 = 13.396, p < 0.05). To determine the source of the identified difference, t-tests were completed for all possible pairs of academic discipline groups, and it was found that the Science group scored significantly higher on the Task Orientation dimension than did the Humanities, Social Science, Applied Science, and Other academic discipline groups. It was also found that chairpersons who identified Business as their academic discipline group scored significantly higher on the Task Orientation dimension than did the Humanities, Social Science, and Other academic discipline groups.

No significant differences were found in any of the three leadership dimensions with respect to the age of the chairpersons. Each dimension was analyzed using a one-way analysis of variance among the age clusters, and the null hypothesis of no significant difference was not rejected.

The differences in leadership style dimension scores of chairpersons with varying amounts of professional experience were analyzed by first identifying the types of experience to be investigated. The types of professional experience were: teaching experience, current position, educational administration, and administration in non-educational organizations. A one-way analysis of variance of leadership style dimension scores for each type of professional experience was performed to determine the level of significance of observed differences.

No significant differences were found in leadership style dimensions with respect to the length of experience in the current position. An analysis of variance of leadership style dimensions with respect to total educational administrative experience revealed no significant difference among the participating chairpersons. However, there were significant differences found when length of teaching experience was analyzed. Specifically, it was found that there were significant differences in Relationships Orientation scores and Effectiveness scores between chairpersons with different amounts of teaching experience. The respective one-way analyses of variance in these cases revealed F-values of 3.194 (p = 0.014) and 2.369 (p = 0.05) with degrees of freedom of 5/61.

To further analyze the source of significant differences found

in the analyses of teaching experience, the various strata of professional experience where significant differences existed were extracted and a t-test for every possible pairing was completed to determine if the mean scores were significantly different.

Based upon the analyses of t-tests it was found that chairpersons with more than 10 years of teaching experience scored significantly higher on the Relationships and Effectiveness leadership dimensions than those with less teaching experience.

Another type of professional experience where significant differences were identified was the amount of administrative experience in non-educational organizations. The one-way analysis of variance found significant differences in the Effectiveness scores of chairpersons with different amounts of administrative experience in non-educational organizations ($F = 5.785$, d.f. $= 2/64$; $p = 0.005$). Further analysis to determine the contribution of the various strata to the differences was accomplished by completing t-tests between every possible pairing of strata of chairpersons by amounts of administrative experience in non-educational organizations. These tests found that chairpersons who had more than four years of administrative experience in non-educational organizations scored significantly higher on the Effectiveness dimension than those with less administrative experience in non-educational organizations.

Significant differences were found in Effectiveness scores with respect to level of education. A one-way analysis of variance identified differences between chairpersons with different amounts of college education ($F = 3.125$, d.f. $= 3/63$; $p = 0.034$).

To identify the source of the differences, t-tests were completed

between every possible pairing of educational levels. The t-values were tested at the 0.05 level of significance, and it was found that chairpersons who hold doctor's degrees or had completed the course work for the doctorate scored significantly higher on the Effectiveness dimension than did those with master's or bachelor's degrees.

The final chairperson characteristics, management education and sex, were analyzed and no significant differences were found in any leadership dimension with respect to those two characteristics.

When the analysis of the difference between chairpersons and chief academic officers was completed for each of the leadership style dimension scores using a two-tailed t-test, it was found that the differences between the mean scores were not significant at the 0.05 level of significance.

Conclusions

The finding that Task Orientation scores are significantly different among different academic discipline groups appears to be consistent with the view that college student curricular groups and graduates of different academic discipline programs differ psychologically with respect to intelligence, liberalism of attitudes, and psychological adjustment (Bereiter and Freedman, 1962). A plausible conclusion, therefore, is that these psychological differences between academic disciplines may affect an individual's predisposition toward achieving organizational tasks and this difference is reflected in his task orientation score.

The two academic discipline groups which scored highest on the Task Orientation dimension, Science and Business, are considered by

many to be primarily concerned with concrete ideas and things rather than abstract ideas and people. The scientific disciplines deal with facts, physical laws and relationships; business disciplines are concerned with production, profits, and work schedules.

Perhaps a finding in the research of Bereiter and Freedman (1962) might further clarify the bases of the conclusion:

> . . . scientists developed early interests in their fields and seem to have followed fairly straight courses toward their ultimate position; social scientists seem to have been lacking in any particular early commitment, to have gone in various directions in college, finally coming to social sciences . . . after having become disenchanted [with other fields of study]. (pp. 580-581).

It appears that one's orientation toward task accomplishment which is reflected in this statement may also be related to his early development.

Most of the academic discipline groups; that is, Humanities, Social Science, and Other, which scored significantly lower Task Orientation scores are primarily concerned with people and their social interaction. The humanities and social science disciplines deal with man's creativity and relationships between people. The physical education and recreation department chairpersons who made up the "Other" group scored low in Task Orientation. A possible explanation of this finding may be that since this group deals with human interactions and motivation, members could be considered applied behavioral scientists who might be expected to show lower Task Orientation. Fiedler and Chemers (1974) imply that, as an organization or discipline increases its focus on human and social interaction, the leaders tend to decrease in task motivation.

The chi-square test results provided in Table XVIII indicate

that there is an apparent inconsistency in the Applied Science academic discipline group. One would expect that the Task Orientation of the group would be high because of the nature of the disciplines included. A possible partial explanation for the low percentage of Task orientated chairpersons within this group is that approximately 40 percent of the group were nursing or health related chairpersons. Although these individuals use scientific concepts in the performance of their occupation, the subjects of their application are people. Therefore, some members of the "Applied Science" group might have roots in the social sciences where Task Orientation has been shown to be lower.

Inasmuch as the chairpersons reported having spent approximately 16 years in the classroom, nearly twice the total length of time spent in educational administration, it is not surprising for them to be comparable to teachers and trainers regarding Relationships Orientation scores.

The research previously reported in Table IV, page 44, shows that teachers and trainers generally have high Relationships Orientation scores; the data analyzed in testing Hypothesis 1b (see Appendix E), shows that the chairpersons, regardless of academic discipline group, will indicate a high percentage of high Relationships Orientation scores.

One might expect to find differences in leadership style dimensions between younger and older chairpersons. The younger chairperson would seem to be more enthusiastic, more conscious of the task of accepting new challenges. The older chairperson, on the other hand, would seem to be more mature and experienced and, therefore, more

effective. The finding that age does not affect the leadership style dimension scores of division/department chairpersons leads to the conclusion that conditioning has occurred during experiences prior to entering the chairperson position. This conditioning may have been tutorage which took place under the direction of the predecessor or the chief academic officer causing the style rigidity prior to entering the position.

Also, one might expect to find significant differences in the three leadership style dimension scores based on the number of years a chairperson has been in his position. The findings of this study indicate that the number of years in the position does not alter any of the three leadership style dimension scores. A conclusion drawn from these data is that length of time in a position cannot be relied on as a variable which increases scores in any of the three leadership style dimensions; that is, a person's development does not occur in the vacuum of time alone. Special training efforts and an environment fostering leadership development must supplement length of service. If the number of years of experience in the position affected leadership style, it would have been reflected in the scores. The analysis did not support the proposition that any significant difference existed. Apparently the number of years an individual spends doing a particular job or set of tasks has little to do with the development of his leadership behavior because the chairperson may be primarily involved in routine administrative work.

A similar and possibly related conclusion is drawn from the analysis of the differences in leadership style scores reported between chairpersons with different amounts of experience in educational

administration. Coupled with the fact that approximately 90 percent
of the educational administrative experience possessed by the par-
ticipating chairpersons was gained in the current position. These
findings in this study lead to the conclusion that experiences in
educational administration should be supplemented by leadership train-
ing experiences and an environment fostering the need for leadership
development.

The results of the analysis of differences in Relationships
Orientation between chairpersons with different amounts of teaching
experience shows that those individuals with less teaching experience
scored lower relationships score than those with more teaching
experience. It is reasonable to conclude that the act of teaching
increases ones awareness of individual human needs and consequently
increases the concern for people or Relationships Orientation. The
lower level of Relationships Orientation may be evidenced in the
individuals' making all the decisions, demanding obedience, and
actions being taken without consultation with others. Higher Rela-
tionships Orientation can be seen exhibited in a person involving
others in decisions, dealing with individuals rather than groups, and
developing the potential of others.

Findings displayed in Tables XXII and XXIX indicate that different
lengths of teaching experience enhance the chairpersons' ability to
select appropriate leadership styles in given situations, and that
effectiveness is positively affected by the number of years spent in
the classroom. It is likely that the type of experience gained by
the teacher while dealing with individual student needs increases his
ability to read situations and to respond with appropriate behavior.

Students present new and demanding situations, different social and economic backgrounds, a variety of aptitudes and abilities, unique interests in the subjects, and desires to learn. These students, as unique individuals, require diverse instructional approaches, and the effective teacher learns that he must apply an appropriate approach to interest and motivate an individual. It is reasonable to conclude that this developed ability to read situations and to apply appropriate techniques in teaching situations may be transferable to other settings, specifically to managerial situations.

Chairpersons with different amounts of administrative experience in non-educational organizations score differently on the Effectiveness dimension (Tables XXIII and XXXI). Reddin's research (1970) suggests that different types of administrative experience tend to improve situational sensitivity or Effectiveness. Although an individual who enters a managerial role from outside the organization will normally experience a necessary period of adjustment, he may become more effective than his colleagues who have been in education longer because of his previous exposure to a variety of situations. This introduction of "new blood" may well have significant influence on the overall effectiveness of the college.

The analysis of the differences in leadership style dimension scores between chairpersons with different levels of education revealed a significant difference in Effectiveness scores. The chairpersons who had progressed to a higher level of education scored significantly higher. Situational sensitivity or Effectiveness requires intellectual alertness and curiosity (Reddin, 1970). Assuming that an individual who completes increasingly higher educa-

tional levels is sharpening his intellectual alertness and expanding his curiosity, one can reasonably conclude that the person's Effectiveness will increase along with higher educational levels attained. The findings of this study lead one to a plausible conclusion. In an organization which has education as its primary purpose, those leaders who have the most education enjoy a higher level of esteem and may exhibit more confidence. This confidence may be seen in that individual's willingness to "step out of the mold" and apply different approaches to situations.

Since a purpose of educational administration and management training is to develop educational leadership, it is a rather disappointing finding to discover that there are no significant differences between chairpersons with different amounts of college credits in management or educational administration. One could conclude that the time, money, and effort expended in training individuals as educational leaders is wasted, and the findings of the study might be interpreted to support this conclusion. However, there is also a different conclusion to be drawn. In reviewing many of the management educational programs in practice, Fiedler and Chemers (1974) found that most of the programs were based upon a common assumption that the leader should have as much influence and control as possible and that there is an "ideal" leadership style. They believe that this type of management education is ineffective in developing leaders and suggest that programs which develop situational awareness and interaction might be more effective. Perhaps educational administration programs which primarily focus on curriculum development, history of education, and administrative procedure have

not given adequate attention to leadership development. Based on these items of information one can conclude that management and educational administrative courses as they currently exist do not affect leadership behavior significantly.

The sex of chairpersons did not seem to be a factor influencing the leadershyp style dimensions. Based upon the analysis of the data obtained for this study (Tables XXXVII, XXXVIII, and XXXIX), there is no significant difference between the sexes with respect to leadership style dimensions. Although the percentage of female chairpersons is relatively low, a situation which may be reflective of selection processes, those women who serve as chairpersons have apparently developed a desire to succeed in what has been "a man's world" and therefore are functioning in a manner similar to their male colleagues.

The leadership styles of chairpersons and chief academic officers are similar. This finding is consistent with previous studies which concluded that the control the superordinate exerts on the subordinate results in a conditioning effect which produce leadership style similarities (Fiedler, 1967). During the everyday functioning of the college, it is not unusual to find the chief academic officer dealing with individual faculty members on situations ranging from student centered problems to major curricular questions. In these situations faculty members may develop leader role expectations which are communicated to the chairperson who in turn may attempt to modify his leadership behavior to meet the expectations.

Recommendations

Recommendations for action by chairpersons, the college where
they work, and universities who help develop them are:

Chairpersons

1. To increase their Effectiveness, chairpersons should augment their
   educational experiences by pursuing additional course work leading
   to advanced levels of education.

2. To improve and increase Effectiveness, chairpersons should main-
   tain contact with students by occasionally teaching classes and
   advising students.

Two-Year Colleges

1. Because of the importance of the chairperson's role and because of
   the influence he may have on the division or department, colleges
   should insure that individuals serving in middle management
   positions and, in particular, chairpersons, are informed of the
   existing organizational philosophy and policies.

2. Because of the increase in Effectiveness related to number of
   years in the classroom, colleges should encourage chairpersons to
   maintain contact with students by occasionally teaching classes
   and advising students.

3. Because there are differences among academic discipline groups,
   top college administrators should maintain an awareness of
   individual chairperson's leadership style and the unique situa-
   tional factors confronting the chairperson and insure that no

"ideal" leadership style is imposed as appropriate in all situations.

4. To increase and improve Effectiveness, colleges should encourage chairpersons to pursue continued professional development through attainment of advanced degrees.

5. Because of the influence on non-education organization experience or Effectiveness, colleges should actively seek qualified individuals who have administrative experience outside of education to fill vacancies in chairperson positions.

6. Colleges should encourage women to seek the position of chairperson, and where possible, recruit them.

Universities

1. To improve the Effectiveness of chairpersons, universities offering educational programs in educational administration should expand the curriculum to include leadership training with specific focus on situational effectiveness.

Recommendations for further research related to leadership styles of division/department chairpersons are:

1. Because of the possible differences between pre-disposed and actual leadership behavior, research related to actual leader behavior should be conducted.

2. The assumption was made for this study that the demands on division/department chairpersons are uniform for all state-supported two-year colleges in the Oklahoma State System for Higher Education. There should be further research to study the influence of student enrollments, age of the institution, and

geographic location of the college on the leadership styles of
division/department chairpersons.

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APPENDIXES

APPENDIX A

DEMOGRAPHIC DATA QUESTIONNAIRE

DEMOGRAPHIC DATA

CHARACTERISTICS OF DIVISION CHAIRPERSONS
AND LEADERSHIP STYLES

A. Current Job Title: _____

B. Department or Division: _____
    Indicate classification below:
        Humanities☐, Science☐, Social Science☐,

        Applied Science☐, Business☐, Other☐Specify: _____

C. Number Full-Time Employees Directly Supervised (Not Students or
    Secretary): _____

D. Experience in Current Position: _____years _____months

E. Teaching Experience (Full-time classroom teaching):

        _____years _____months

F. Experience in Educational Administration (Full-time):

        _____years _____months

G. Administrative Experience Outside of Education (Full-time adminis-
    trative--not summer):

        _____years _____months

H. Sex: Male☐, Female☐

I. Age: _____years

J. Highest Degree: Less than Bachelor's☐, Bachelor's☐,

        Master's☐, Doctoral Course Work Completed☐, Doctorate☐

        Highest degree held in: _____

K. Number of Formal Graduate Hours in Management or Administration:
        _____credit hours

APPENDIX B

LIST OF PARTICIPATING COLLEGES

TABLE XXXXIII

PARTICIPATING OKLAHOMA TWO-YEAR STATE-SUPPORTED COLLEGES

College	Location	Spring 1977 Enrollment		Participating Chairpersons
		Head Count	FTE	
Carl Albert Junior College	Poteau, OK	1,375	789	7
Conners State College	Warner, OK	1,304	1,384	6
Eastern Oklahoma State College	Wilburton, OK	1,702	1,501	7
El Reno Junior College	El Reno, OK	801	634	4
Murray State College	Tishomingo, OK	1,357	1,090	4
Northeastern Oklahoma A & M College	Miami, OK	2,286	2,193	8
Northern Oklahoma College	Tonkawa, OK	2,024	1,275	8
Oscar Rose Junior College	Midwest City, OK	8,091	5,822	3
Seminole Junior College	Seminole, OK	1,760	1,233	7
South Oklahoma City Junior College	Oklahoma City, OK	4,770	2,728	5
Tulsa Junior College	Tulsa, OK	6,917	4,207	3
Western Oklahoma State College	Altus, OK	1,612	1,058	5

APPENDIX C

INFORMATION LETTER AND PROJECT DESCRIPTION

Dear

The significant growth and changes experienced in the American two-year college require dynamic leadership. Since some have suggested that the office of division chairperson is the key to an effectively functioning college, the demand for leadership at the division level is critical. As a result of the need to develop such leadership and my interest in middle management in the two-year college, I am undertaking a study of leadership styles of division chairpersons in Oklahoma state-supported two-year colleges. I believe that the results might contribute to the creation of an on-going leadership development program for division chairpersons.

If the study is to accurately reflect the leadership styles, it is essential that key personnel in each of the colleges be involved. Your expressed willingness to participate in the study is certainly appreciated. As I mentioned to you in our recent telephone conversation, the following procedure will be followed in the study.

1. I will personally visit your campus on _____, _____, at _____ to administer the test.

2. I will provide individual and group feedback to each person who participated.

3. No individual chairperson or dean will be identified in the study.

4. I will provide you with a copy of the final document abstract.

I have enclosed several copies of a description of the study for distribution to your chairpersons. Your assistance in distributing the descriptions will help develop an awareness of the study among them. If there are any questions, please call me at one of the numbers listed below. Thank you so very much for your assistance.

Sincerely,

Robert P. Todd
Program Manager
Natural & Applied Sciences
405/682-1611, ext. 265
405/681-7941

RPT:jkw

Enclosures

CHARACTERISTICS OF DIVISION CHAIRPERSONS
AND LEADERSHIP STYLES

Successful organizations are successful primarily due to the existance of one of our scarcest resources--dynamic and effective leadership. Because of his role as "the person in the middle and at the same time the person on the firing line," the division chairperson in American higher education must provide effective leadership.

The role of the chairperson has grown since the beginning of departmentalization in the early part of the nineteenth century. The Carnegie Commission reports that the department or division has been the key to academic organization over most of the last century with the majority of administrative decisions (approximately 80 percent) being made at this level. The chairperson is expected to be "an academic administrator, manager, coordinator, and at the same time, a head teacher."

Little work has been done to identify the leadership styles of chairpersons with even less organized activity in developing leadership at this level of management. As a result of the need to develop such leadership and my interest in middle management in the two-year college, I am undertaking a study of leadership styles of division chairpersons in Oklahoma state-supported, two-year colleges. I believe that the results may contribute to the creation of an on-going leadership development program for division chairpersons.

The primary instrument which will be used is the Management Style Diagnosis Test, designed by W. J. Reddin. The test is directly related to the Three Dimensional Theory of Managerial Effectiveness and has been widely tested in business, government, and educational institutions. Data obtained through the application of this instrument will be analyzed with relationships between leadership styles and selected demographic data being described.

The following procedure will be followed for collection and use of data:

1. I will visit your campus to administer the test.

2. I will provide individual and group feedback to each person who participated.

3. No individual chairperson or dean will be identified in the study.

4. I will provide a copy of the final document abstract to each participating college.

If the study is to accurately reflect the leadership styles, it is essential that key personnel in each of the colleges be involved. Your support is urgently needed.

APPENDIX D

MANAGEMENT STYLE DIAGNOSIS TEST

AND SCORING PROCEDURE

MANAGEMENT STYLE DIAGNOSIS TEST

This *Management Style Diagnosis Test* is designed solely for use by managers. It enables them to look closely at their unique style of on-the-job behavior and provides them with valuable insights about it. The test is directly related to the 3-D Theory of Managerial Effectiveness and has been widely tested in business, government, and universities. Over 100,000 managers have taken it. The test takes about 20 minutes to answer and score.

INSTRUCTIONS

Look at the 64 pairs of statements in the Questionnaire. If you think the first statement of a pair is the one that best applies to you, circle *a*. If you think the second statement is the one that best applies to you, circle *b*. When you have finished, each item will have either an *a* or a *b* circled.

EXAMPLE

The first pair of statements is:

a. *He overlooks violations of rules if he is sure that no one else knows of the violations.*

b. *When he announces an unpopular decision, he may explain to his subordinates that his own boss has made the decision.*

If you think that statement *a* is a better description of your behavior than *b*, circle *a*. If you think that statement *b* applies, circle *b*.

To decide which statement best applies, ask yourself: *Of the two statements given, which best describes what I actually do on the job I now have?* It may be helpful, in difficult cases, to answer as someone would who really knew and understood your present approach to your job.

Some statements you may find a little ambiguous, sometimes both will apply, often neither will seem to apply. However, in every case, pick the one statement that best describes you at present, if you were faced with the circumstances described.

MANAGEMENT STYLE DIAGNOSIS TEST

1. a. He overlooks violations of rules if he is sure that no one else knows of the violations.

   b. When he announces an unpopular decision, he may explain to his subordinates that his own boss has made the decision.

2. a. If an employee's work is continually unsatisfactory, he would wait for an opportunity to have him transferred rather than dismiss him.

   b. If one of his subordinates is not a part of the group, he will go out of his way to have the others befriend him.

3. a. When the boss gives an unpopular order, he thinks it is fair that it should carry the boss's name and not his own.

   b. He usually reaches his decisions independently and then informs his subordinates of them.

4. a. If he is reprimanded by his superiors, he calls his subordinates together and passes it on to them.

   b. He always gives the most difficult jobs to his most experienced workers.

5. a. He allows discussions to get off the point quite frequently.

   b. He encourages subordinates to make suggestions, but does not often initiate action from them.

6. a. He sometimes thinks that his own feelings and attitudes are as important as the job.

   b. He allows his subordinates to participate in decision making and always abides by the decision of the majority.

7. a. When the quality or quantity of departmental work is not satisfactory, he explains to his subordinates that his own boss is not satisfied and that they must improve their work.

   b. He reaches his decisions independently and then tries to "sell" them to his subordinates.

8. a. When he announces an unpopular decision, he may explain to his subordinates that his own boss has made the decision.

   b. He may allow his subordinates to participate in decision making, but he reserves the right to make the final decision.

9. a. He may give difficult jobs to inexperienced subordinates, but if they get into trouble he will relieve them of the responsibility.

   b. When the quality or quantity of departmental work is not satisfactory, he explains to his subordinates that his own boss is not satisfied and that they must improve their work.

10. a. He feels it is as important for his subordinates to like him as it is for them to work hard.

    b. He lets other people handle jobs by themselves, even though they may make mistakes.

11. a. He shows an interest in his subordinates' personal lives because he feels they expect it of him.

    b. He feels it is not always necessary for subordinates to understand why they do something, as long as they do it.

12. a. He believes that disciplining subordinates will not improve the quality or quantity of work in the long run.

    b. When confronted with a difficult problem, he attempts to reach a solution which will be at least partly acceptable to all concerned.

13. a. He thinks that some of his subordinates are unhappy and tries to do something about it.

    b. He looks after his own work and feels it is up to higher management to develop new ideas.

14. a. He is in favour of increased fringe benefits for management and labor.

    b. He shows concern for increasing his subordinates' knowledge of the job and the company, even though it is not necessary in their present position.

15. a. He lets other people handle jobs by themselves, even though they may make mistakes.

    b. He makes decisions independently, but may consider reasonable suggestions from his subordinates to improve them if he asks for them.

16. a. If one of his subordinates is not a part of the group, he will go out of his way to have the others befriend him.

    b. When an employee is unable to complete a task, he helps him to arrive at a solution.

17. a. He believes that one of the uses of discipline is to set an example for other workers.

    b. He sometimes thinks that his own feelings and attitudes are as important as the job.

18. a. He disapproves of unnecessary talking among his subordinates while they are working.

    b. He is in favour of increased fringe benefits for management and labor.

19. a. He is always aware of lateness and absenteeism.

    b. He believes that unions may try to undermine the authority of management.

20. a. He sometimes opposes union grievances as a matter of principle.

    b. He feels that grievances are inevitable and tries to smooth them over as best he can.

21. a. It is important to him to get credit for his own good ideas.

    b. He voices his own opinions in public only if he feels that others will agree with him.

22. a. He believes that unions may try to undermine the authority of management.

    b. He believes that frequent conferences with individuals are helpful in their development.

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23. a. He feels it is not always necessary for subordinates to understand why they do something, as long as they do it.
    b. He feels that time-clocks reduce tardiness.

24. a. He usually reaches his decision independently and then informs his subordinates of them.
    b. He feels that unions and management are working towards similar goals.

25. a. He favors the use of individual incentive payment schemes.
    b. He allows discussions to get off the point quite frequently.

26. a. He takes pride in the fact that he would not usually ask someone to do a job he would not do himself.
    b. He thinks that some of his subordinates are unhappy and tries to do something about it.

27. a. If a job is urgent, he might go ahead and tell someone to do it, even though additional safety equipment is needed.
    b. It is important to him to get credit for his own good ideas.

28. a. His goal is to get the work done without antagonizing anyone more than he has to.
    b. He may assign jobs without much regard for experience or ability, but insists on getting results.

29. a. He may assign jobs without much regard for experience or ability, but insists on getting results.
    b. He listens patiently to complaints and grievances, but often does little to rectify them.

30. a. He feels that grievances are inevitable and tries to smooth them over as best he can.
    b. He is confident that his subordinates will do satisfactory work without any pressure from him.

31. a. When confronted with a difficult problem, he attempts to reach a solution which will be at least partly acceptable to all concerned.
    b. He believes that training through on-the-job experience is more useful than theoretical education.

32. a. He always gives the most difficult jobs to his most experienced workers.
    b. He believes in promotion only in accordance with ability.

33. a. He feels that problems among his workers will usually solve themselves without interference from him.
    b. If he is reprimanded by his superiors, he calls his subordinates together and passes it on to them.

34. a. He is not concerned with what his employees do outside of working hours.
    b. He believes that disciplining subordinates will not improve the quality or quantity of their work in the long run.

35. a. He passes no more information to higher management than they ask for.
    b. He sometimes opposes union grievances as a matter of principle.

36. a. He sometimes hesitates to make a decision which will be unpopular with his subordinates.
    b. His goal is to get the work done without antagonizing anyone more than he has to.

37. a. He listens patiently to complaints and grievances, but often does little to rectify them.
    b. He sometimes hesitates to make a decision which he feels will be unpopular with his subordinates.

38. a. He voices his own opinions in public only if he feels that others will agree with him.
    b. Most of his subordinates could carry on their jobs without him if necessary.

39. a. He looks after his own work and feels it is up to higher management to develop new ideas.
    b. When he gives orders, he sets a time limit for them to be carried out.

40. a. He encourages subordinates to make suggestions, but does not often initiate action from them.
    b. He tries to put his workers at ease when talking to them.

41. a. In discussion, he presents the facts as he sees them and leaves others to draw their own conclusions.
    b. When the boss gives an unpopular order, he thinks it is fair that it should carry the boss's name and not his own.

42. a. When unwanted work has to be done, he asks for volunteers before assigning it.
    b. He shows an interest in his subordinates' personal lives because he feels they expect it of him.

43. a. He is as much interested in keeping his employees happy as in getting them to do their work.
    b. He is always aware of lateness and absenteeism.

44. a. Most of his subordinates could carry on their jobs without him if necessary.
    b. If a job is urgent, he might go ahead and tell someone to do it, even though additional safety equipment is needed.

45. a. He is confident that his subordinates will do satisfactory work without any pressure from him.
    b. He passes no more information to higher management than they ask for.

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46. a. He believes that frequent conferences with individuals are helpful in their development.

   b. He is as much interested in keeping his employees happy as in getting them to do their work.

47. a. He shows concern for increasing his subordinates' knowledge of the job and the company, even though it is not necessary in their present position.

   b. He keeps a very close watch on workers who get behind or do unsatisfactory work.

48. a. He allows his subordinates to participate in decision making and always abides by the decision of the majority.

   b. He makes his subordinates work hard, but tries to make sure that they usually get a fair deal from higher management.

49. a. He feels that all workers on the same job should receive the same pay.

   b. If any employee's work is continually unsatisfactory, he would wait for an opportunity to have him transferred rather than dismiss him.

50. a. He feels that the goals of union and management are in opposition, but tries not to make his view obvious.

   b. He feels it is as important for his subordinates to like him as it is for them to work hard.

51. a. He keeps a very close watch on workers who get behind or do unsatisfactory work.

   b. He disapproves of unnecessary talking among his subordinates while they are working.

52. a. When he gives orders, he sets a time limit for them to be carried out.

   b. He takes pride in the fact that he would not usually ask someone to do a job he would not do himself.

53. a. He believes that training through on-the-job experience is more useful than theoretical education.

   b. He is not concerned with what his employees do outside of working hours.

54. a. He feels that time-clocks reduce tardiness.

   b. He allows his subordinates to participate in decision making and always abides by the decision of the majority.

55. a. He makes decisions independently, but may consider reasonable suggestions from his subordinates to improve them if he asks for them.

   b. He feels that the goals of union and management are in opposition, but tries not to make his view obvious.

56. a. He reaches his decisions independently and then tries to "sell" them to his subordinates.

   b. When possible, he forms work teams out of people who are already good friends.

57. a. He would not hesitate to hire a handicapped worker if he felt he could learn the job.

   b. He overlooks violations of rules if he is sure that no one else knows of the violations.

58. a. When possible, he forms work teams out of people who are already good friends.

   b. He may give difficult jobs to inexperience subordinates, but if they get in trouble he will relieve them of the responsibility.

59. a. He makes his subordinates work hard, but tries to make sure that they usually get a fair deal from higher management.

   b. He believes that one of the uses of discipline is to set an example for other workers.

60. a. He tries to put his workers at ease when talking to them.

   b. He favors the use of individual incentive payment schemes.

61. a. He believes in promotion only in accordance with ability.

   b. He feels that problems among his workers will usually solve themselves without interference from him.

62. a. He feels that unions and management are working towards similar goals.

   b. In discussion, he presents the facts as he sees them and leaves others to draw their own conclusions.

63. a. When an employee is unable to complete a task, he helps him to arrive at a solution.

   b. He feels that all workers on the same job should receive the same pay.

64. a. He may allow his subordinates to participate in decision making, but he reserves the right to make the final decision.

   b. He would not hesitate to hire a handicapped worker if he felt he could learn the job.

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Step 1:
Total the A's
in each
Horizontal Row

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64

A____
B____
C____
D____
E____
F____
G____
H____

Step 2:
Total the B's
in each
Vertical Column ____ ____ ____ ____ ____ ____ ____ ____

Step 3:
Step 1 Totals ____ ____ ____ ____ ____ ____ ____ ____

Step 4:
Step 2 plus 3 ____ ____ ____ ____ ____ ____ ____ ____

Step 5:
Adjustment Factor ____ ____ ____ ____ ____ ____ ____ ____

Step 6:
Step 4 plus 5
(Style Profile) ____ ____ ____ ____ ____ ____ ____ ____

A	B	C	D	E	F	G	H
Deserter	Missionary	Autocrat	Compromiser	Bureaucrat	Developer	Benevolent Autocrat	Executive

DIMENSION SCORES

Task Orientation:

$T_O = C + D + G + H = $ _____

Relationships Orientation:

$R_O = B + D + F + H = $ _____

Effectiveness:

$E = E + F + G + H = $ _____

LEADERSHIP STYLE SYNTHESIS

```
                                      E above 34 ─── EXECUTIVE
                    R_O above 34 ─────┤
                                      E below 34 ─── COMPROMISER
     T_O above 34 ──┤
                                      E above 34 ─── BENEVOLENT AUTOCRAT
                    R_O below 34 ─────┤
                                      E below 34 ─── AUTOCRAT
T_O ───────── R_O ───────── E ─────────────────
                                      E above 34 ─── DEVELOPER
                    R_O above 34 ─────┤
                                      E below 34 ─── MISSIONARY
     T_O below 34 ──┤
                                      E above 34 ─── BUREAUCRAT
                    R_O below 34 ─────┤
                                      E below 34 ─── DESERTER
```
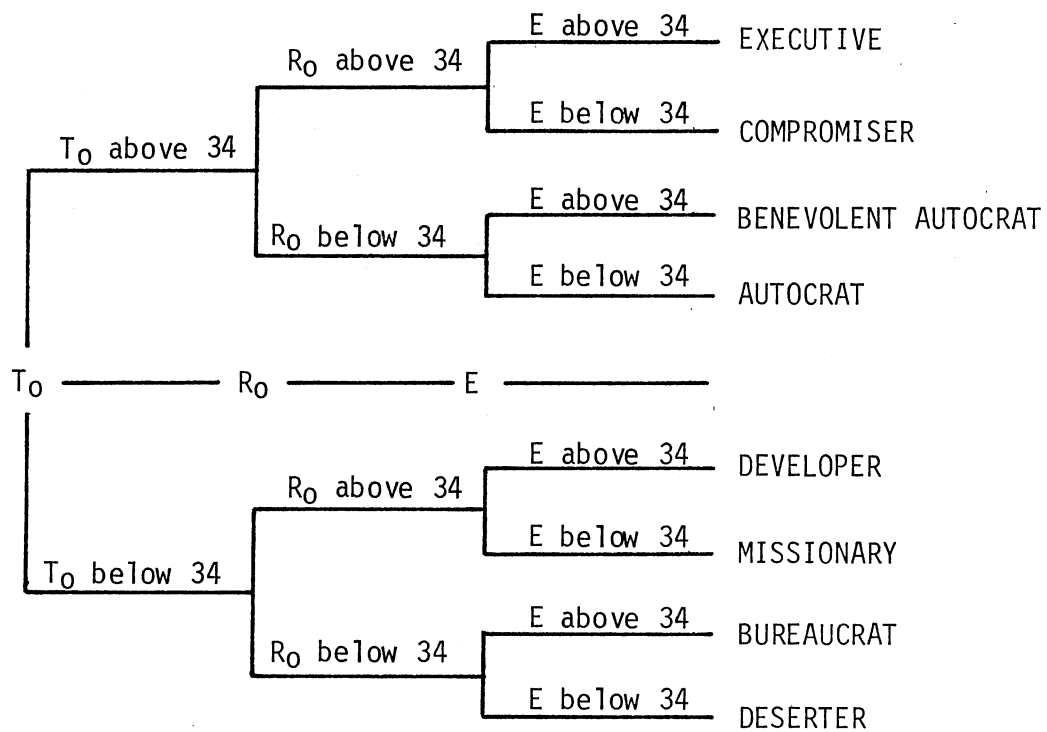
APPENDIX E

NON-SIGNIFICANT CHI-SQUARE ANALYSES FOR

ACADEMIC DISCIPLINE GROUP

TABLE XXXXIV

2 x 6 CONTINGENCY TABLE FOR ACADEMIC DISCIPLINE
GROUP BY RELATIONSHIPS ORIENTATION

Count Row % Col % Total	Discipline						Row Total
	Humanities	Science	Social Science	Business	Applied Science	Other	
Low R_O	1 10.0 8.3 1.5	4 40.0 26.7 6.0	1 10.0 11.1 1.5	1 10.0 10.0 1.5	2 20.0 13.3 3.0	1 10.0 16.7 1.5	10 14.9
High R_O	11 19.3 91.7 16.4	11 19.3 73.3 16.4	8 14.0 88.9 11.9	9 15.8 90.0 13.4	13 22.8 86.7 19.4	5 8.8 83.3 7.5	57 85.1
Column Total	12 17.9	15 22.4	9 13.4	10 14.9	15 22.4	6 9.0	67 100.0

TABLE XXXXV

2 x 6 CONTINGENCY TABLE FOR ACADEMIC DISCIPLINE
GROUP BY EFFECTIVENESS

Count Row % Col % Total	Humanities	Science	Social Science	Business	Applied Science	Other	Row Total
Low E	6	8	5	6	9	3	37
	16.2	21.6	13.5	16.2	24.3	8.1	55.2
	50.0	53.3	55.6	60.0	60.0	50.0	
	9.0	11.9	7.5	9.0	13.4	4.5	
High E	6	7	4	4	6	3	30
	20.0	23.3	13.3	13.3	20.0	10.0	44.8
	50.0	46.7	44.4	40.0	40.0	50.0	
	9.0	10.4	6.0	6.0	9.0	4.5	
Column Total	12	15	9	10	15	6	67
	17.9	22.4	13.4	14.9	22.4	9.0	100.0

APPENDIX F

NON-SIGNIFICANT ANALYSES OF VARIANCE

FOR PROFESSIONAL EXPERIENCE

TABLE XXXXVI

SUMMARY OF ANOVA FOR EFFECT OF PROFESSIONAL EXPERIENCE
ON TASK ORIENTATION SCORES

Source of Variation	S.S.	d.f.	M.S.	F	Significance of F
Experience in Current Position	12.09	4	3.02	0.303	0.999
Residual	617.82	62	9.96		
TOTAL	629.91	66			
Teaching Experience	55.26	5	11.05	1.17	0.390
Residual	574.65	61	9.42		
TOTAL	629.91	66			
Experience in Non-Educational Organizations	26.92	2	12.96	1.38	0.260
Residual	603.99	64	9.44		
TOTAL	629.91	66			
Educational Administrative Experience	6.98	4	1.75	0.174	0.999
Residual	622.93	62	10.05		
TOTAL	629.91	66			

TABLE XXXXVII

SUMMARY OF ANOVA FOR EFFECT OF PROFESSIONAL EXPERIENCE
ON RELATIONSHIPS ORIENTATION SCORES

Source of Variance	S.S.	d.f.	M.S.	F	Significance of F
Experience in Current Position	6.83	4	1.71	0.191	0.999
Residual	555.67	62	8.96		
TOTAL	562.60	66			
Experience in Educational Administration	45.75	4	11.44	1.37	0.270
Residual	516.85	62	8.34		
TOTAL	562.60	66			
Administrative Experience in Non-Educational Organizations	33.68	2	16.84	2.04	0.100
Residual	528.92	64	8.26		
TOTAL	562.60	66			

TABLE XXXXVIII

SUMMARY OF ANOVA FOR EFFECT OF PROFESSIONAL EXPERIENCE ON EFFECTIVENESS SCORES

Source of Variation	S.S.	d.f.	M.S.	F	Significance of F
Experience in Current Position	16.65	4	4.16	0.68	0.999
Residual	377.62	62	6.09		
TOTAL	394.27	66			
Experience in Educational Administration	17.70	4	4.43	0.73	0.999
Residual	376.57	62	6.07		
TOTAL	394.27	66			

APPENDIX G

COCHRAN TEST FOR HOMOGENEITY OF VARIANCE

TABLE IL

TESTS OF HOMOGENEITY OF VARIANCE FOR CASES
WHERE NULL HYPOTHESES WERE REJECTED

Variants	Maximum Variance	Σ Variance	Number of Variances (k)	Number of Observations (n)	C	Critical C (p = 0.01)
Relationships-- Teaching Experience	13.79	40.96	6	11	0.337	0.408
Effectiveness-- Teaching Experience	21.32	53.34	6	11	0.399	0.408
Effectiveness-- Administrative Experience In Non-Educational Organizations	7.99	17.35	3	22	0.460	0.572
Task-- Discipline	13.16	43.56	6	11	0.31	0.357
Effectiveness-- Level of Education	7.76	19.16	4	17	0.4	0.488

APPENDIX H

CODED RAW DATA

TABLE L

CODED RAW DATA FOR CHAIRPERSON CHARACTERISTICS
AND LEADERSHIP STYLE DIMENSION SCORES

| Chairperson | Chairperson Characteristic Code | | | | | | | | | Leadership Style Dimension Scores | | |
	A	B	C	D	E	F	G	H	I	T_O	R_O	E
1	6	3	1	1	3	1	1	4	4	32	27	34
2	4	1	2	1	3	1	3	3	3	35	34	40
3	5	1	2	1	2	2	2	1	1	33	37	36
4	3	1	1	1	2	1	1	3	3	32	34	32
5	1	2	3	2	1	1	1	2	2	29	36	34
6	2	2	2	2	3	1	2	3	5	41	37	37
7	4	2	3	3	1	1	1	2	1	32	38	35
8	2	2	3	2	1	1	1	4	5	31	33	33
9	5	1	4	1	1	1	2	2	2	32	39	32
10	2	2	4	2	1	1	2	2	4	35	38	27
11	1	2	5	2	1	2	3	2	1	33	39	33
12	6	2	3	1	1	1	1	3	2	28	39	32
13	3	2	6	2	1	1	3	2	6	31	33	33
14	4	2	5	2	2	2	4	2	3	34	34	32
15	3	4	6	4	2	1	3	2	6	31	36	34
16	1	4	6	4	1	1	3	2	3	31	34	32
17	3	5	6	5	1	1	4	2	1	33	36	30
18	4	2	3	2	2	1	2	3	4	31	35	35
19	1	1	4	1	1	2	1	4	3	34	37	35
20	5	1	1	1	3	2	2	2	1	33	35	38

TABLE L (Continued)

Chairperson	Chairperson Characteristic Code									Leadership Style Dimension Scores		
	A	B	C	D	E	F	G	H	I	T_O	R_O	E
21	6	4	5	4	1	1	3	2	3	32	43	36
22	2	2	5	2	1	1	2	2	1	34	40	30
23	5	5	6	5	3	1	3	2	6	30	34	32
24	3	1	4	1	1	1	2	4	1	31	38	34
25	2	3	3	3	2	1	2	4	1	30	30	30
26	5	3	4	3	2	1	3	2	6	34	36	32
27	5	3	5	3	1	2	4	2	1	31	38	36
28	2	4	6	2	2	1	3	2	6	31	39	35
29	4	3	5	3	1	2	2	3	3	35	40	32
30	3	3	5	3	1	1	3	2	4	31	37	31
31	1	2	5	4	1	1	2	2	6	38	30	35
32	2	2	4	2	1	1	2	3	4	23	37	34
33	5	3	2	3	2	2	4	2	3	34	40	34
34	4	4	6	4	1	2	3	3	3	33	32	35
35	5	3	4	2	1	1	2	2	4	29	30	30
36	4	1	4	1	1	2	2	2	3	32	34	32
37	1	1	6	1	2	2	4	2	1	27	35	29
38	3	1	5	3	1	1	4	2	6	28	37	33
39	2	1	3	1	1	1	1	2	1	36	32	33
40	2	1	5	3	1	1	2	2	1	34	41	34
41	5	3	3	3	2	1	2	2	1	31	36	31
42	6	1	5	1	1	1	2	2	1	28	37	33
43	5	2	5	2	1	1	2	2	2	31	38	33

TABLE L (Continued)

| Chairperson | Chairperson Characteristic Code | | | | | | | | | Leadership Style Dimension Scores | | |
	A	B	C	D	E	F	G	H	I	T_o	R_o	E
44	4	5	6	5	3	1	4	2	2	34	35	33
45	1	4	6	4	1	1	3	2	1	31	34	28
46	1	5	6	5	3	1	4	2	1	37	34	34
47	2	5	3	5	2	1	4	2	6	34	29	30
48	5	3	5	3	3	1	3	4	2	30	41	37
49	5	5	6	5	2	1	4	2	3	30	40	34
50	2	5	6	5	1	1	4	2	1	32	37	34
51	5	1	2	1	1	1	1	2	1	33	35	34
52	2	1	5	1	1	1	2	1	1	34	37	35
53	1	1	5	3	1	1	3	2	1	29	36	35
54	2	1	4	1	1	1	1	2	1	26	39	28
55	4	2	5	3	1	2	2	2	1	32	35	33
56	3	2	4	3	1	1	2	2	6	30	38	34
57	6	2	3	2	1	1	1	2	2	36	35	35
58	5	2	2	4	3	1	4	2	4	28	35	33
59	2	4	6	4	1	1	3	2	1	35	38	37
60	6	5	5	5	1	1	2	2	4	28	36	31
61	1	4	6	4	1	1	3	3	1	28	35	31
62	3	1	5	1	1	1	2	4	1	25	39	35
63	4	1	2	1	2	1	1	2	3	28	35	29
64	1	2	6	2	1	1	2	2	5	27	38	34
65	5	5	6	5	1	1	3	3	6	32	36	32
66	2	5	6	5	1	1	3	2	2	33	40	33

TABLE L (Continued)

Chairperson	Chairperson Characteristic Code									Leadership Style Dimension Scores		
	A	B	C	D	E	F	G	H	I	T_O	R_O	E
67	1	5	5	5	1	1	2	2	1	31	35	31

Key to Raw Data Codes

Chairperson Characteristic Code

A. Academic Discipline Group

Humanities = 1
Science = 2
Social Science = 3
Business = 4
Applied Science = 5
Other = 6

B. Experience in Current Position

Less than 2 years = 1
2-5 years = 2
6-10 years = 3
11-15 years = 4
More than 15 years = 5

C. Teaching Experience

Less than 2 years = 1
2-5 years = 2
6-10 years = 3
11-15 years = 4
16-20 years = 5
More than 20 years = 6

D. Experience in Educational Administration

Less than 2 years = 1
2-5 years = 2
6-10 years = 3
11-15 years = 4
More than 15 years = 5

E. Administrative Experience in Non-Educational Organizations

Less than 2 years = 1
2-4 years = 2
More than 4 years = 3

F. Sex

Male = 1
Female = 2

G. Age

35 or less years old = 1
36-45 years old = 2
46-55 years old = 3
56 or more years old = 4

H. Educational Level

Bachelor's = 1
Master's = 2
Doctoral Course Work Complete = 3
Doctor's = 4

I. Management Education

0 credits = 1
1-6 credits = 2
7-12 credits = 3
13-18 credits = 4
19-24 credits = 5
25 or more credits = 6

VITA²

Robert Patton Todd

Candidate for the Degree of

Doctor of Education

Thesis: LEADERSHIP STYLES AND CHARACTERISTICS OF OKLAHOMA STATE-SUPPORTED TWO-YEAR COLLEGE DIVISION/DEPARTMENT CHAIRPERSONS

Major Field: Higher Education

Biographical:

Personal Data: Born in Oklahoma City, Oklahoma, September 14, 1940, the son of Mr. and Mrs. R. R. Todd.

Education: Graduated from Capitol Hill High School, Oklahoma City, Oklahoma, in May, 1958; enrolled in engineering program at Oklahoma State University, 1958-1960; received Bachelor of Science Degree in Civil Engineering from the University of Oklahoma in August, 1963; received Master of Engineering degree in Civil Engineering from the University of Oklahoma in August, 1965; enrolled in doctoral program in engineering at the University of Oklahoma, 1968-1972; completed requirements for the Doctor of Education degree at Oklahoma State University in July, 1977.

Professional Experience: Graduate teaching assistant, School of Civil Engineering, University of Oklahoma, 1963-64; Engineer-in-Training, Oklahoma State Department of Highways, 1964-65; Bridge Design Engineer, Oklahoma State Highway Department of Highways, 1965-66; Instructor, Captain, U.S. Army Medical Field Service School, 1966-68; Engineering Design Systems Analyst, Oklahoma State Department of Highways, 1968-69; Assistant Management Analysis Officer, Oklahoma State Department of Highways, 1969-70; Assistant Research Division Engineer, Oklahoma State Department of Highways, 1970-72; Program Manager, South Oklahoma City Junior College, 1972-Present.