AN ANALYSIS OF ADMINISTRATIVE LEADERSHIP
BEHAVIOR AND AUTHORITY IN THE PHYSICAL EDUCATION DEPARTMENTS IN COLLEGES

AND UNIVERSITIES IN THE
UNITED STATES

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Thesis Approved:


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## CHAPTER I

## INTRODUCTION

Education for a long time has been seeking understanding for leadership behavior and authority. Since 1900, there have been over 400 separate pieces of research in the nature of leadership. The results challenge many accepted stereotypes about leadership. ${ }^{1}$

Some persons see a leader as an eloquent speaker, a person of Superior intellect, or a servant of man. Other beliefs held by some people are: a person who is a leader in some situation will be a leader in all situations; some people are born leaders and other are not; leadership is restricted to a few people; a specific position provides a person leadership; leadership is a prestige position; a leader is a person who can influence other people to accept his goals. ${ }^{2}$ The research results have not supported the aformentioned hypotheses.

One of the earliest approaches to the study of leadership was an attempt to find relationships between traits and leadership. There was no positive correlation between intelligence and leadership, scholarship and leadership, or height and leadership. But some traits give the person an advantage in the situation in which he or she exerts leadership. Generally, most of the conclusions were negative. ${ }^{3}$

Another approach to the study of leadership was to examine "styles of leadership." Numerous studies were conducted to identify the relationship between certain styles of leadership and group achievement, and group climate. ${ }^{4}$ The result of these studies indicated that the same groups or similar groups operating under different styles of leader-
ship will develop different climates and patterns of achievement. ${ }^{5}$
It is clear that the style of leadership has been defined variously as democratic, indirect, autocratic...etc. Initiating and Consideration is more likely to be associated with "Superior" group achievement and group maintenance. It is especially interesting that Halpin and Winer (1952), using the method of factor analysis, identified Initiating Structure and Consideration as two critical dimensions of leadership behavior. ${ }^{6}$ These findings are consistent with the descriptions of democratic leadership as it was operationally defined in a study conducted by Lewin (1939). ${ }^{7}$

Halpin (1966), verified this notion as follows:
In fact, it is our impression, and here we are speculating that what ordinarily is referred to as democratic administration or democratic leadership is presisely what we defined "operationally" as leadership behavior characterized by high initiation of structure and high consideration. 8

Other studies conducted by Morris and Seeman (1950), and Frech (1949), related to leadership behavior and effectiveness, noted that a leader's effectiveness was measured by the contribution which he/she made to group effectiveness ${ }^{9}$. ${ }^{10}$ Campbell (1956) in his study, indicated that he preferred testing rather than assuming that the behavior of some individual has modified the behavior of the group in some fashion. ${ }^{11}$

Stogdill (1957) believed in his study that the descriptive dimensions of leadership in an organized group constituted a constellation of interacting variables. Dealing simultaneously with all of the dimensions even a large part of the variables operating in an interaction situation involving leadership was exceedingly diffecult. Stogdill then enumerated his beliefs: (1) that the leader was not isolated, but involved with other members in responsibility differentiations and per-
sonal interactions; (2) that leadership could reside in several or many members; and (3) that the behavior of the leader conditioned the beha. viors of other members of the organization. Furthermore, he indicated that leaders were those who occupied positions to which certain highly Specified expectations were attached, and one of these was that they were expected to act as leaders of their group. ${ }^{12}$

## Statement of the Problem

The purpose of this investigation was to examine the behavioral aspects of administrative leadership in departments of physical education at the college and university level. The investigation seeks the following:

1. How do leaders perceive their own leadership behavior and their authority?
2. How do faculty members perceive the behavior and the authority of their leader?

## Need for the Study

Physical education have been slow to join the search for relevant and meaningful concepts of leadership and administration. Administrative texts have emphasized methods of formal organizational structure. However, very little has been written that considers either leader behavior or the dynamic relationship of such behavior with the people who are members of the organization.

In his study investigating leadership behavior, 0lafson (1969) compared perceptions of leadership behavior in junior college and university physical education departments. The results of his study suggested that these departments have a different orientation which may
require a departmental chairman to exhibit different aspects of leader behavior. ${ }^{13}$

From a review of the aforementioned studies, as well as others which appear in chapter II, it is apparent that there is still great need for more investigation of the aspects of leadership behavior and authority. This investigator analyzed both leader and group factors in an attempt to promote greater understanding of physical education administration in higher education.

## Hypotheses

This researcher will examine the following hypotheses:

1. There will be no significant difference between leader's. leadership behavior as self-perceived and as perceived by their faculty members.
2. There will be no siqnificant difference between a leader's leadership authority as self-perceived and as perceived by their faculty members.

A11 hypotheses mentioned above will be tested at . 05 level of significance.

## Limitations of the Study

The personal interest and experience of the investigator, as well. as certain requirements to statistically examine the problem, imposed the following limitations:

1. The sample of leaders included administrators who had been in their present leadership position for a minimum of only one year.
2. Three faculty members responses, in addition to the one from their leader, were necessary for an institution to be included in the
investijation.
3. Faculty members responses were solicited from persons who had been employed in their present position for a minimum of one full year.

## Assumptions of the Study

It was necessary to restrict the scope to the following basic underlying assumptions:

1. The degree to which a leader feels accepted by his/her group is a measure of personal relationship between the leader and the group.
2. The leader-member relationship is a decisive factor in determining the favorableness of the situation for the leader.
Definitions of Terms

The following definitions are applicable to this study:

## Leadership

"Leadership is the effort to influence or change the behavior of others in order to accomplish organizational, individual, or personal goals."14

Leader

## Allen stated that:

A leader is the one member of the group who is formally charged with the responsibility for the group accomplishments in the sample population. Some leaders had a title of position such as head, chairman, or director, where as others served in a leadership capacity without an official title. In all instances, it was assumed that leaders were committed to two fundemental group goals: group achievement and group maintenance. 15

## Leadership Behavior

Leadership behavior is a term used to describe how a leader performs or acts as he/she carries out the functions of his/her leadership role. ${ }^{16}$

## Leadership Authority

## Fiedler stated that:

Authority means the degree to which the position it-self enable the leader to get his/her group members to comply with and accept his/her direction and leadership. It is thus potential power which the organization provides for the leader's use. 17

## Faculty Members

Faculty members are those people employed by a school as teachers, designers of materials, curriculum specialists, and others whose purpose is to develop an orginazed plan to promote learning, and achieve the same comman goal or goals. ${ }^{18}$

AAHPERD

A random sample was taken from a list of names and addresses of administrators, who belong to the American Alliance for Health, Physical Education, Recreation and Dance.

LBDQ....Form XII

The Leader Behavior Description Questionnaire....Form XII was developed from a series of studies conducted by the Personal Research Board of the Ohio State University. ${ }^{19}$ A complete description of this questionnaire will be given in chapter III of this study. Also, a copy of this questionnaire will be found in Appendix A.

Leader Authority Scale

This scale was developed by Fiedler and Hunt (1967). The scale consisted on eighteen items which measured indices of position power. ${ }^{20}$
${ }^{1}$ Andrew W. Halpin, Theory and Research in Administration, New York: Macmillan (1966), pp. 124-126.
${ }^{2}$ Ibid., p. 150.
$3^{3}$ Ibid. , p. 162.
${ }^{4}$ Andrew W. Halpin, and Don B. Croft, The Organizational Climate of Schools, Conract \# SAE 543 (8639). Washington, D.C.: United States Office of Education, Dept. of Health, Education \& Welfare (JuTy, 1962), p. 2.
${ }^{5}$ Ibid., p. 120.
${ }^{6}$ Andrew W. Halpin, and James B. Winer, "Studies in Air Crew Composition," Technical Report III. Personal Research Board, Study on the Leadership Behavior of the Air Commander, (Columbus: Ohio State University, 1952.)
${ }^{7}$ Kurt Lewin, R. Lippitt, and R. White, "Patterns of Aggressive Behavior in Experimentally Created Social Climates." Journal of Social Psychology, 10 (1939), pp. 271-299.
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${ }^{10}$ John R. French, "Moral and Leadership," Human Factors in Undersea Warfare, Washington, D.C. National Research Council, 1949.
${ }^{11}$ Donald T. Campball, "Leadership and Its Effect Upon the Group," Bureau of Business Research, (Columbus, Ohio: Ohio State University, 1956.)
${ }^{12}$ Ralph M. Stogdill, "Leadership and Structure of Personal Interaction," Bureau of Business Research, (Columbus, Ohio: Ohio State University, 1957.)

13 Gordon A.A. Olafson, "Leadership Behavior of Junior College and University Physical Education Departments Administrations." (Unpublished Ph.D. dissertation, University of Illinois, 1969.)

14 Fred E. Fiedler, A Theory of Leadership Effectiveness. New York: McGraw-Hill (1967), p. 22.
${ }^{15}$ Patricia Allen, An Analysis of Administrative Leadership Behavior and Group Interaction in Departments of Physical Education for Woman of Selected Colleges and Universities," Doctoral dissertation, University of Oregon, 1971.
${ }^{16}$ Ibid., p. 43.
${ }^{17}$ Fred E. Fiedler, A Theory of Leadership Effectiveness, p. 25.
${ }^{18}$ Robert M. Gagne, and Leslie J. Briggs., "Principles of Interactional Design, 2nd ed., New York: McGraw-Hill (1974), p. 18.
${ }^{19}$ Alvin E. Coons, and Ralph M. Stogdill, "Leaders Behavior: Its Description and Measurement, eds., (Columbus, Ohio: Bureau of Business Research, Ohio State University, 1957.)
${ }^{20}$ Fred E. Fiedler, A Theory of Leadership Effectiveness, p. 24.

## CHAPTER II

## REVIEW OF LITERATURE

In the past, "Leadership and Management" have been often used interchangably. As the behavioral sciences developed, however, the concept of leadership has been increasingly limited to designate a particular aspect of interpersonal relationships. To some authorities, leadership means the role of change agent; to others it means the influence which one person exerts on another. ${ }^{21}$ Implicit in both these conceptualizations is the notion of process. Whatever the conception, behavioral scientists typically differentiate leadership from administration. To be effective, however, educational administration must include leadership. ${ }^{22}$ While the concept of leadership has been restricted in one sense, it has been broadened in another. Originally, leadership was thought of in terms of the direction or command of a group by its most able member. Leadership and management were considered to be antithesis of democratic action, for the assumption was that if an organization is to be effective, someone must be in charge and tell others what to do. However, it was found that the foregoing concept, that leadership consists of the ablest person or group telling others what to do, is not comprehensive enough because it fails to include a whole range of leadership phenomena, not only in education but in business, government, and other areas of activity as well.

Many administrators have discovered that leadership can be highly effective when they are not directing, but instead are helping individuals
and groups to formulate their own goals, identify their own problems, and develop procedures for achieving goals and solving the attendant problems. Often the provision of a wholesome environment is an important aspect of leadership. To be adequate, a concept of leadership must be broad enough to encompass various types of leadership. ${ }^{23 .}$

An Overview of Leadership Theories

Many leadership theories have been developed over a period of years in the phenomenon of leadership. These theories have been grouped by Stogdill into the following six major types:

Great Man Theories

These theories suggest that leaders exert power because they possess qualities which differentiate them from and which appeal to the masses
there is no such thing as leadership by the masses. The individuals in every society possess different degrees of intellgence, energy, and moral force, and in whatever direction the masses may be influenced to go, they are always led by the superior few. 24

In this survey and analysis of the "great man" theories of leadership Jennings (1960) stated that the leader is endowed with superior qualities. This assumption gave a chance for new theories to rise âs a trait theory of leadership. These theories concentrated on the traits of personality and character of the leaders. 25

## Environmental Theories

The pioneer researchers in these types of theories believe that leadership is a function of the situation and that leadership is vested in a person by a group, not because this person is inherently a leader, but
because he or she can perform needed group functions. A leader does not produce the situation; instead, it is the situation which calls forth a leader. One from the pioneer theorists in this group was Mumford (1909) who stated that the leader that emerged depended on the abilities and skills which make him able to solve social problems in its' required times. These problems might exist in the society during the time of stress, change, and adaptation. ${ }^{26}$ Person (1928) advanced two hypotheses to account for leadership: (1) any particular situation plays a large part in determining leadership qualities and the leader for that situation, and (2) the qualities in an individual which a particular situation may determine as leadership qualities are themselves the product of a succession of prior leadership situations which have developed and molded him. ${ }^{27}$

The environmental theories derive their strength from this fact: while organizations in general may exhibit broad similarities of structure and function, they also, in particular, show strong elements of uniqueness. ${ }^{28}$ This fact suggested that any member of a group may become its leader under circumstances that enable him to perform the required functions of leadership and that different persons may contribute in diffe= ren. ways to the leadership of the group. This brings the concept of leadership, not as a personal quality, but as an organizational function. ${ }^{29}$

In his study of leadership in school superintendents, Halpin (1956) Noted that "the behavior of leaders varies from one leadership situation to another." On the whole, current research appears to support the "situational" in contrast to the trait approach in the study of leader behavior. He also noted that nothing in the findings of the research conducted with the Leader Behavior Description Questionnaire contradict this "situational" position. ${ }^{30}$

These theories represent a synthesis of the great man and environmental theories and view leadership as the interactive effects between the leader and the situation. Leadership is characterized by relationships among persons rather than by leader traits or situational attributes. The goals and needs of the individual are seen as interacting with those of the group. Among these theorists is Westburgh (1931) who suggested that the study of leadership must include (1) the effective, intellectual, and action traits of the individual, as well as, (2) the specific conditions under which the individual operates. ${ }^{31}$ Another study conducted by Gerth and Mills (1952), suggested that:

To understand leadership, attention must be paid to (1) the traits and motives of the leader as a man, (2) images that selected publics hold of him and their motives for following him, (3) the featurcs of the role that he plays as a leader, and (4) the institutional context, him ani his followers might involve. 32

Stogdill and Shartle (1955) proposed to:
Study leadership in terms of status, interactions, perceptions, and behavior of individuals in relation to other members of the organized group. Thus leadership is regarded as a relationship between persons rather than as a characteristic of the isolated individual. When data for all the members of a group are combined and interrelated, they provide a means for studying leadership in terms of the structure and function of organization. 33

Cattell (1951) maintained that the two primary functions of leadership are: (1) helping the group to find the means to a goal already agreed upon, and (2) helping the group to decide upon a goal. The first function deals with measured performances, and the second deals with the drive and goal direction of the group. Leadership represents a dynamic interaction between the goals of the leader and the goals and needs of the followers. It serves the function of facilitating selection and achievement of the group goals. ${ }^{34}$

## Interaction-Expectation Theories

These theories concentrate on the importance of interactions and the expectations of the group members, and the ways in which interactions and expectations influence each other.

A theory was developed by Stogdill (1959) called expectancy-reinforcement theory of role attainment. In this theory Stogdill stated that as group members interact and engage in mutual task performance, they reinforce the expectation that each will continue to act and interact in accord with his previous performance. Thus, the individuals' role is defined by mutually confirmed expectations relative to the performances and interactions he/she will be permitted to contribute to the group. The leadership potential of any given member is defined by the extent to which he/she initiates and maintains structure in interaction and expectation. ${ }^{35}$

Fiedler (1967) has developed a contingency theory of leadership. In his theory, Fiedler identified three variables which affect the favorability of a situation for the leader and also mentioned that these three variables can be good approaches to getting the job done. First, the leader-member relation is the degree and extent to which the leader and the members of his group like and trust one another. Here, it seems clear that if a leader is trusted and well liked, he/she does not have to have a superior rank in order to get the task accomplished. Second, the task structure, where the task can be either spelled out very explicity so that it can be done "by the members" or left vague and poorly defined. It is more difficult, because neither the leader nor his/her followers has a clear idea about the nature of the task or criteria for accomplishing it. If task is clearly defined, on the other hand, the leader's
authority is backed up by the organization, and he finds it much easier to lead. Finally, the leader's position power; this factor refers to the leader's legitimate, as distinct from his/her charismatic or personal power. Obviously, the leaders' job is made easier if he/she has a great deal of position power. ${ }^{36}$

Another theorist who developed a theory related to this area is Evan (1970). Evan proposed a path-goal theory of leadership. The degree to which the leader exhibits consideration tends to determine the follower's perception of the abundance of rewards available to him/her. The degree to which the leader initiates structure determines, in turn, the followers' perception of the behaviors through which rewards may be attained. ${ }^{37}$

## Humanistic Theories

These theorists believe that organizations can best achieve their goals when they enable the individuals in the organization to develop their own creative potential. Because human beings are internally motivated, an organization need not create motivation but needs only to harness the already existing motivation. The function of leadership is to free individuals so that they may contribute maximally to their goals through their natural tendency to accept responsibility and to develop. McGregor (1960) was the one who classified organizational leadership into $t_{\text {wo }}$ basic types: (1) an authoritarian type, which he called "Theory $X, "$ and "Theory Y." According to McGregor, the essential task of leadership is to arrange conditions and methods so that people can achieve their own goals best by directing their own efforts toward organizational goals. ${ }^{38}$

Likert (1967) focused on the group and organization within which the leader works. He organized organizational types into four systems
ranging from a purely exploitative, authoritarian, hierachical approach (system 1), to one which is less exploitative but still authoritarian (system 2), to a more consultative approach (system 3), to a participative approach (system 4). Likert stressed the fact that if a company or other organization wanted to apply the results of organizational research, it is necessary to shift from one coordinated system to another. Through these systems, leaders build group cohesiveness and motivation for productivity by providing freedom for responsible decision making and exercise of initiative. ${ }^{39}$

## Exchange Theory

These theories are based on the assumption that social interaction represents a form of exchange in which each group member makes contributions to the group at a personal cost and in turn receives rewards in the form of tangible payment or psychological satisfaction. The leader is rewarded with esteem and prestige satisfaction in return for special contributions to goal delineation and attainment (Blau, 1964). 40

## Leadership Styles

Within the literature on leadership behavior, reference can be made to a number of differening "leadership styles." A leadership style might be thought of as a particular behavior emphasized by the leader to motivate his or her group to accomplish some end. Leadership styles are usually identified as polar points on a continuum, although actual behavior usually falls somewhere in between the extremes. However, sometimes leadership styles are seen as points on interesting axes; that is, a leader can possess a high or low degree of both polar styles at the same time. The following leadership styles will be discussed:

## Democratic-Autocratic

One of the first studies on leadership styles was conducted by Lewin, Lippitt, and White (1938) at the Iowa Child Welfare Station at the University of Iowa. ${ }^{41}$ They designed the study for five groups of eleven year-old children, supervised by their adult leaders, to perform specific activities. All group variables were held as constant as possible except for the behavior of the leaders, which was deliberately and systematically varied. Observation was concentrated on the behavior of the children in each group as they worked with different leaders.

The main question of the research was, does behavior of group members vary with the different leadership styles? The conclusion was affirmative. The leadership styles of democratic, authoritarian, and laissez-faire were identified and associated with specific group re sponses. The researchers found that under democratic leadership, group members exhibited higher degrees of initiative, morale, cohesiveness, freedom of action, and work quality. On the other hand, they found that under autocratic leadership, the children were more productive, more dependent, showed less creativity, exhibited lower morale, became more frustrated, often exhibited hostility and aggression, and at times left the group. In addition, it was found that under the laissez-faire leadership style, there was less and poorer work done; group members asked for more guidance and frequently showed discontent. ${ }^{42}$

The concepts of democratic, autocratic, and laissez-faire leadership styles caught the imaginations of leaders across the country and around much of the world and have held a prominent position in leaderShip ideology ever since. It was termed "democratic" of the behavior associated with "good leadership" and "autocratic" with "bad," but this
popular connotation was not a finding of the related studies. The differing styles were simply related to various behaviors observed, and no moral judgments were attached by the researchers. ${ }^{43}$

Defensive-Self-Adequate

Gibb (1969), adapted theory $X$ and Theory $Y$, of McGregor's study for what he identified as "Defensive" and "Self-adequate" or low and High trust leadership styles. Gibb argued that there are four basic dimensions of group behavior: (1) the feeling climate, (2) the flow of data within the system, (3) the formation of goals, and (4) the emergence of control. A defensive leader views the members of the group with an orientation of low trust. He/she sees the worker as inherently lazy, irresponsible, and needing to be pressured into action. Therefore, the defensive leadership style is characterized by controlled communication, persuasion, and close managerial control. ${ }^{44}$

A self-adequate leadership style is the alternative to defensive leadership, Gibb added that:
the self-adequate person tends to assume that others are also adequate and, other things being equal, that they will be responsible, loyal, appropriately work-oriented when work is to be performed, and adequate to carry out jobs that are commensurate with their level of experience and growth. 45 Therefore, the self-adequate leader, is characterized by a belief in participative decision making, open channels of communication, and reduced measures of managerial control. 46

## Detective-Scientist Leadership Styles

Getzels (1973), has developed an analogy between the reaction of physical scientists to problem solving and a similar reaction by organizational leaders. ${ }^{47}$ Getzels discussed the inquiry approaches of the ordinary or noncreative scientist and extraordinary or creative scien-
tist. ${ }^{48}$ Getzels stated that the ordinary scientist acts like a detective who waits for a crime to be committed to be presented with a problem before he/she takes any action. If no crime is committed, he/she has nothing to do. The creative scientist, on the other hand, looks for the ingredients of crime and thus creates his/her own problems to solve at a higher lével of thought and analysis:
...the noncreative administrator like the noncreative scientist detective, waits for problems to happen, to be brought to him/ her. He/she deals with presented problems and restricts his/ her and the organization's activity to accommodation and reaction, i.e., to enforced and expendient change. The creative administrator deals not only with presented problems but with discovered problems as well, and broadens his/her and the organization's activities. The creative administrator can also be able to plan for the organization's future. 49

Nomothetic, Ideographic, and Transactional Leadership Styles

Getzels, Lipham, and Camphell (1968) mentioned that the nomothetic leadership styles can be viewed as that possessed by a manager who holds a classical theory view of management activity. He/she emphasizes the requirements of the institution and the demands of the role a worker occupies. The control of subordinate behavior is derived basically through the application of rules and sanctions. "He runs a tight ship," is the ultimate compliment that can be given the leader with a nomothetic setting, the military academy would perhaps be the school most associated with this style. ${ }^{50}$

The ideographic leadership style emphasizes the personal dimension of subordinates behavior with specific sensitivity to the needs of subordinates. This style is reminiscent of the human relations orientation. An art school represents an example of a system best served by an ideographic leadership style. ${ }^{51}$ The transactional leadership style recognizes the need to vary emphasis on each of the other two styles, depending on
the situation.
The transactional leadership style responds to the particular task situation. Many leadership theories do not recognize this necessity. ${ }^{52}$ Initiation Structure-Consideration Leadership Styles

Initiation structure leadership style refers to the leader's behavior in delineating the relationship between himself/herself and members of the work-group, and in endeavoring to establish well-defined patterns of organization, channels of communication, and methods of procedure. ${ }^{53}$

The Consideration leadership style refers to behavior indicative of friendship, mutual trust, respect, and warmth in the relation between the leader and the members of his/her staff. 54

McGregor (1954) commented on these styles as :
....I believed that a leader could operate successfully as a kind of advisor to his/her organization. I thought I could aviod being a "boss." Unconciously, I suspect, I hoped to duck the unpleasant necessity of making difficult decisions, of taking the responsibility for one course of action among uncertain alternatives, of making mistakes and taking the consequences. I thought that maybe I could operate so that everyone would like me-that "good human relations" would el iminate all discard and disagreement. I could not have been more wrong. It took a couple of years, but I finally began to relize that a leader can not avoid the exercise of authority any more than he/she can avoid the responsibility for what happens to his/her organization. 55

## Leadership Responsibility and Authority

In a review of leadership literature, Stogdill (1974) suggested eleven perspectives. Leadership may be defined as:

1. A function of group process.
2. Personality for effects of personality.
3. The art of inducing compliance.
4. The exercise of influence.
5. A form of persuasion.
6. A set of acts or behavior.
7. A power relationship.
8. An instrument of goal achievement.
9. An effect of interaction.
10. A differentiated role.
11. The initiation of structure.

Therefore, from all the above, leadership is really a role that leads toward goal achievement, involves interaction and influence, and usually results in some form of changed structure or behavior of the groups, organizations, or communities. ${ }^{56}$ Strength of personality and ability to induce compliance, or to persuade, are critical variables in the effectiveness of leaders, but their relative influence depends on time and circumstances. ${ }^{57}$

There were other leadership variables which are directly applicable to behavior or acts in group situations. These might be classified as functional definitions of the leadership role. Anyone who performs these functions is fulfilling a leadership role, regardless of his/her formal status in the group. ${ }^{58}$

Two groups or sets of functions have been identified as critical: task functions must be executed to rationally select and achieve goals; maintenance functions associated with emotional satisfaction are required to develop and maintain group, or organizational viability. ${ }^{59}$ The two sets of functions are as following:

Task functions: initiating activity, information seeking, information giving, opinion giving, elaborating, coordination, summarizing, testing feasibility, evaluating, diagnosing.

Marintenance functions: encouraging, gate-keeping, standard setting, following, expressing-group, consensus taking, harmonizing, tension reducing. 61

## Leadership and Authority

The way in which a leader interacts with the group members has been thought to depend, in part, on the leaders' influence over those members.

Fiedler (1963) was concerned with a leaders' ability to influence followers. He coined the term "position power" to refer to the degree to which a leaders' position itself enabled the leader to get his/her group to employ with and accept his/her direction and leadership. ${ }^{6}$

The terms Power and Authority have of ten been confused in the literature. Griffiths (1958) noted tendencies to use the terms interchangebly and to attach authoritarian concepts to either or both terms. He believed that authority was "the outward manifestation of power." 63 Dubin (1951) defined authority as institutionalized power, ${ }^{64}$ a definition amended by Hunter (1953), who added that authority was dependent upon à latent outside force. ${ }^{65}$

## Concept of Authority

Weber (1947) defined authority as "the probability that.certain specific commands (or all commands) from a given source will be obeyed by a given group of persons." ${ }^{66}$ Weber was quick to indicate that authority does not include every mode of exercising power or influence over other persons. He suggested that authority implies legitimacy, that is, authority is a ligitimate kind of power. 67

The basic form of organization, in the traditional sense, is en-visioned as being in the form of an isosceles triangle; the source of authority is found at the apex of the triangle and the broad base represents the mass majority of employees. All decisions and communications are initiated at the top of the structure, and gradually reach those members at the lower fringes of the organization. In this organizational structure, the members at the bottom of the organization are often discontented, disillusioned, and feel misrepresented. Litterer (1965) maintained, however, that:
the superior does not act as a completely free agent. Rather, many of his/her decisions will be guided or molded by general properties of the organization in which he/she finds himself/herself. Hence, leadership quite properly has to be considered primarily as an organizational matter. 68

Leadership and authority do not necessarily go hand-in-hand. All types of groups, whether they are large or small in number, have some type of authority-bearing personage who takes command of the group processes. Barkly (1971) mentioned his point of view on these points as:
....such authority may be only informal. It may also be limited in extent. It may be temporary, but it is likely to exist since all organizations, including....the most voluntary ones, have found that some have to assume more responsibility than others. Responsibility has never been deemed useful without authority commensurate with its effective discharge. 69

Bierstedt (1954) on the other hand, contended that authority did not exist in informal organizations but can be found only in the formal hierarchical arrangement. He added that:
authority is a function of the formal organization...and it is exercised in accordance with specific and usually statutory norms statuses. It makes no appearance in the informal organization...it is this hierarchical arrangement, this stratification of statuses, which permits and indeed makes possible the exercise of authority. 70

Gulick (1937) distinguished between authority and leadership in the following manner:
....the difference may be seen in their relation to the organization; leadership, on the other hand, always presupposes the organization. I would define leadership as the form in the organization through which authority enters into process which means, of course, that there must be leadership as the necessary directive of the entire organized movement. 71

Authority, by itself, can structure and mold the control of the organization, and the maintenance of the superordinate and subordinate roles in the hierarchy. Authority is also an entity which causes a great deal of disharmony within the organization. It is also the source
of struacle and conflict in the attempt to redistribute it's power and rights. ${ }^{72}$

Stogdill (1974) observed that:
....authority, even more than responsibility, is an interactional relationship. The leader can restrict the authority of subordinates by withholding the right to act and decide. He can increase the authority of followers by delegating the right to act. Followers can reduce the leaders' authority by failure or refusel to accept.his/her decision. The area of freedom of a member of an organization is a function, not only of the behavior of his/her superiors and subordinates, but also of his/her perceptions of their behavior and expectations placed upon him/her. 73

A study conducted by Stogdill (1975) of more than 1700 individuals in formal organizations, found that only about 1 in 500 checked the statement "I have no authority whatsoever." He found that even unskilled individuals rated themselves as having more than zero authority and responsibility. Also, he mentioned that every member of the organization possesses some degree of authority for performance of his/ her task. ${ }^{74}$

Types of Authority

Weber (1947) saw three types of authority at work in the administration of organizations. ${ }^{75}$ The three types were as follows:

## Charismatic Authority

This type was based on the charismatic leader principle. The man at the top rules more or less absolutely, and everything that the organization does is a product of, or subject to, his particular will and whim.

Traditional Authority

Under this type, administrative positions were established and
assigned on the basis of custom. Who one is, not what one can do, determines just what one will do.

## Bureaucratic Authority

Here the posts were created and handed out on the basis of fixed principle and functional capabilities. Traditional custom and leader intervention play a small role in the handing of specific cases. ${ }^{76}$

## Formal Authority

This type was identified by March and Siman (1958). This type is vested in the organization and is legally established in positions, rules, and regulations. In joining the organization, employees accepted the authority of their superior; the organization had the right to command and the employees have the duty to obey. ${ }^{77}$

## Legal Authority

This type was based on enacted laws that can be changed by formal, correct procedures. Obedience is not owed to a person or position per se but to the laws that specify to whom and what extent people owe compliance. Thus, this type of authority is extended only within the scope of the authority vested in the office by law. ${ }^{78}$

Functional Authority

Weber identified this type of authority later in his studies. He mentioned that this type of authority has a variety of sources, including authority of competence , and also, authority of person.

Stemmed from personal behavior and attributes it is another distinct
source for legitimate control in the superior-subordinate relationship. In an organizational context, such authority is often informal because the norms of the informal organization often buttress and legitimize the power of the individual. ${ }^{79}$

In his attempts to measure both the internal and external symbols of the leaders' position power or authority, Fiedler (1967) was concerned with, among others, authority to hire and fire, giving raises in rank and pay, position title, and tenure of office. All of these items he interpreted as symbolic of leaders' power to influence group members; the source of power being the position itself. ${ }^{80}$ An eighteen-item check list containing various indices of position authority was used by four judges to obtain an operational measure of a leaders' influence. ${ }^{81}$

A basic assumption about leadership was that a leader will gain more performance from his/her group if he/she has a great amount of position authority. A study of Dutch college students, divided into groups that had leaders with high position authority and others whose leaders had low authority revealed no significant difference in the task achievement of either type of group. ${ }^{82}$ Ninty-six Belgiun Navy group were compared in another large study. Half the groups had leaders with high position authority, the other half with leaders of low authority. There were no significant difference in the performance of the groups. 83

## Leaders' Traits

Most of the previous studies of administrators were done by the traits technique. This technique attempted to measure certain personality characteristics of administrators that could be attributed to men and women who were considered by their co-workers to be effective leaders. In other words, a trait was a distinguishing quality that related to con-
sistent behavior of a person in an administrative position and it was not dependent on a combination of traits indicative of a "personality." An individual or group was distinguished by the tendency to always react to a situation with the responses. 84

Stogdill did a broad study of all research done before (1948) which pertained to traits considered essential to leadership. A hundred and twenty four studies were reviewed and compiled to yield a list of traits. The traits with the highest correlation with leadership were: "originality, popularity, sociability, judgment, aggressiveness, desire to excel, humor, cooperativeness, liveliness, and athletic ability." 85

Various supplementary measures other than the listing of traits also have been employed in an effort to determine the traits associated with leadership. These included intelligence tests, personality tests, and rating scales. The following conclusions were supported in a positive relationship in fifteen or more of these studies reviewed by Stogdill:
...the leader exceeded the average member of his group in intelligence;. scholarship (or academic achievement,) dependability in exercising responsibility, social participation, and socioeconomic status. 86

Dimack surmised that the "personality alone was capable of inspiring the staff with confidence, values and sentiments. ${ }^{\circ 87} \mathrm{He}$ felt that the man or woman with the most character, which he termed personality was the best administrator. Inclusive with the personality, was his integrity and his/her ability to feel deeply for other people and things. The successful administrator was the one who commanded the best balance of physique, mentality, personality, technical equipment, philosophical insight, knowledge of human behavior, social adaptibility, judgement, ability to understand and get along with people, and a sense of social
purpose and direction. ${ }^{88}$ Dimack stated that judgement was a major factor that diffrentiated the good administrator from the poor administrator. Judgement as he defined it became a matter of the administrator balancing the right combination of "intelligence, attitudes, emotions, and sensitivity to his/her staff and environment." 89 The administrator was the source of "creativity, spontaneity, flexibility, and initiative which kept the organization dynamic and growing." 90

Russell (1938) used the trait approach to define leadership: "To acquire the position of leader, he must excel in the qualities that confer authority, self-confidence, quick decision, and skill in deciding the right measures." ${ }^{191}$

When Bird (1940) studied a twenty item analysis of leadership, he found approximatly seventy-nine different traits mentioned by the participants that indicated the difficulty in determining what attributes describe effective administrators. ${ }^{92}$

In another study conducted by Coulder (1950), he found that the: danger of traits analysis studies of what makes a good leader was not distribution of traits differing with age, sex, education, and occupation. ${ }^{93}$

Stogdill believed that the effective leader carried his/her tasks through to completion. The traits of self-confidence and initiative were involved. Differences in organizational needs and purposes, and a continual state of change in the technological and scientific areas have also affected the process and dimensions of administration. ${ }^{94}$

Stogdill argued that traits considered as isolated enitities hold little diagnostic or predictive significant. In clusters or combination, however, they interact in a way advantageous to the individual seeking leadership responsibilities. He identified the clusters of traits as:

1. Capacity (intelliqence, alertness, variable, facility, originality, judgement).
2. Achievement (schlarship, knowledge, athletic accomplishments).
3. Responsibility (dependability, initiative, persistance, aggressiveness, self-confidence, desire to excel).
4. Participation (activity, sociability, cooperation, adaptability, humor).
5. Status (socioeconomic position, popularity).
6. Situation (mental level, status skills, needs and interests of followers, objectives to be achieved, etc. $)^{95}$
Note how clear it is on number 6 which showed that leadership is actually a combination of specific personal attributes fulfilling leadership needs that arise in specific situations. Here is what Stogdill wrote about this:
.....strong evidence indicates that different leadership skills and traits are required in different situations. The behavior and traits enabling a mobster to gain and maintain control over a criminal gang are not the same as those enabling a religious leader to gain and maintain a large following. Yet certain general qualities, such as courage, fortitude, and conviction-appear to characterize both. 96

## Leadership Behavior Related Studies

Halpin (1955) pointed out a need for multiple criteria approaches to studying leadership effectiveness and indicated that some findings rested on the leaders' descr ,tion of his own behavior which had little relationship to others' views of his/her behavior. ${ }^{97}$ Halpin (1956) described the lack of objective measures of the "effectiveness" of leaders. In working to fill the gap in this neglected area of research, he modified the Leader Behavior Description Questionnaire from a previous study of aircraft commanders and found significant differences in leadership behavior and leadership ideology. The commander initiated structure better while superintendents rated higher on consideration.

Jacobs (1965) used the Leader Behavior Description Questionnaire and found that the behavior of the principal during his relation with his
staff members was the most significant factor in encouraging curricular change. ${ }^{99}$

The categories of Initiation Structure-and Consideration from the Leader Behavior Description Questionnaire have greater relationship to the actual behavior and efficiency than the other categories according to some studies. Gunningham (1964) and Carter (1967) studied county extension agents to determine if Initation Structure and Consideration were sufficiently related to performance to allow their use as predictors of success. They found agents above the median on these categories to be more effective. ${ }^{100,101}$

Bailey (1959) discovered that secondary school principals high in effectiveness (as measured by. the Leader Behavior Description Questionnaire) displayed a moderate degree of personality rigidity, which was the most significant factor in this study. ${ }^{102}$ Christner and Hemphill (1955) using fifty-two newly assembled B-29 combat crews, concluded that the crews whose leaders scored high on Consideration and Initiating Structure would tend to develop more favorable crew attitudes than did crews whose commanders scored lower on both leader behavior dimensions. 103

A study was conducted by Halpin (1966) using the Leader Behavior Description Questionnaire to study the leader behavior of a group school superintendents in order to:
....determine the relationship between the superintendent's own perception of how he behaves on the Initiating Structure and Consideration dimensions as contrasted with board and staff perceptions. 104

Based upon the results obtained from this survey, Halpin came to the following conclusions: (1) that superintendents tend to adopt different behavioral roles in dealing with the members of staff and board groups; (2) that in respect to Consideration, the superintendents do not
see themselves as either staffs or boards see them; (3) that the boards of education described the superintendents as Initiating Structure to a greater extent than they are perceived as doing by either the staffs or the superintendents themselves; (4) that the superintendents and staffs agreed that superintendents showed Initiating Structure less than the school boards expected; (5) that boards did not differ from school to school in their expectation of how the superintendents should behave on either dimension; and finally (6) that the school boards tended to describe the superintendents as higher on both leadership behavior dimension of Consideration and Initiation of Structure than did the staffs. 105

The Leader Behavior Description Questionnaire was used in à study designed by Hamphill (1955). A study in which members of eighteen departments in a liberal arts college describe the behavior of their department chairman. The subjects also ranked the five departments in their college that had the general reputation on the campus for being the best led. The results indicated that departments with a high reputation were those whose leaders scored high on both the Consideration and Initiation Structure dimensions of the Leader Behavior Description Questionnaire. ${ }^{106}$

Directors of instruction, school superintendents, and staff members were studied by Luckie (1963). He found that staff members agreed with superintendents, but not the directors, when describing the directors' Initiation of Structure behavior. However, all subjects agreed in their desriptions of the directors' Consideration. ${ }^{107}$ Another study by Gott with similar results was obtained. Gott used the Leader Behavior Description Questionnaire and the Principal Behavior Check List with principals, superintendents, and faculty members of large senior high schools in

Texas. He found agreement among all subjects in their responses to all behaviors of these instruments except Initiating Structure. In the latter instance, faculty members and principals disagreed. ${ }^{108}$

Two large studies from industry have been informative regarding how members of a group react to certain behaviors of their leader. Stogdill (1966) surveyed various types of twenty-seven organizations and found the following results: (1) leader Consideration was related to employee satisfaction with freedom on the job; (2) leader Initiating StruStructure was related to employee satisfaction with the organization; (3) leader Consideration was related to group drive and freedom, whereas Initiating Structure was related to group loyalty to the organization. 109 Beer (1966) investigating employees of an insurance company, found that Initiating Structure was positively related to employee motivation. Moreover, he found that Consideration and Tolerance of Freedom were related to employee needs of self-actualization, esteem, and autonomy; but Initiating Structure was more positively related to security needs. 110

Evenson (1959) using the following refrence groups ......principals, superintendents, and faculty members, studied the leader behavior of Arincipals in forty secondary schools. The investigator concluded that the teachers within a school essentially agreed on the perceptions of the Initiating Structure and Consideration shown by their principal, whereas there was considerable variation between schools on both factors, although less on Initiating Structure. A further finding was the lack of consistancy between each respondents group relative to the Consideration dimension. The principals as a group perceived their leader behavior differently than did the superintendents and faculty members. The staff perceived the real leader behavior scores to be significantly lower than did the superintendents for both dimensions. ${ }^{111}$

Another study was conducted by Carson (1964) to study the leader behavior of junior college deans as perceived by the president, department heads, student leaders, and the dean himself. Student leaders did not agree with department heads or principals from school to school as to their perceptions and their expectations of the Consideration and Initiating Structure of the deans. Presidents, deans, and department heads indicated that both dimensions (Consideration and Initiating Structure) were of equal importance and should be equally present in the leader behavior of the dean. This differed somewhat from the view of the students who placed greater importance on the Consideration factor. 112

Bessent studied the relationship between the administrator behavior of elementary school principals by means of a battery of tests which included the Leader Behavior Description Questionnaire. He secured leader behavior descriptions (Consideration and Initiation Structure) from a group of subordinates and superiors as well as through an interview with the principals. He could not find any significant relationship between the principals' behavior and the expectations of their superintendents. The teachers had higher Consideration scores than Initiating Structure scores whereas there was no significant differences between the superintendents' expected score and the principals' real leader behavior score. ${ }^{113}$

St. Clair (1962) in another similar study, added the Principals' Behavior Check List, and tested the effectiveness of the clinical procedure in which biographical data and daily writter diaries were kept by each subject. During the study, it was assumed that Consideration was less situation-bound than was Initiating Structure, therefore, Consideration would be more predictable. Neither dimension, however, was found to be significantly situation-bound ${ }^{114}$

Watts. (1964) tried to identify if there was any relationship between
variables, such as the principals' perceived leader behavior by using the Leader Behavior Description Questionnaire. : There were not any statistically significant differences between Initiating Structure and Consideration for age and preparation, but Consideration was signifi cantly related to years of experience. ${ }^{115}$

Trimble (1967) conducted a study to figure out if there was any relationship between an administrator's behavior and his involvement in the decision-making process by means of a Decision-Making Involvement Instrument which was developed by Trimble himself, and the Leader Behavior Description Questionnaire dimensions of Consideration and Initiating Structure. His conclusion was that teachers assigi, significantlly higher scores to the Consideration dimension of leader behavior. Furthermore, no relationship was established between the leader behavior dimensions and the decision-making instrument. ${ }^{116}$

Carson and Schults (1964) investigated perceptions and expectations of leadership behavior among deans of junior colleges. Using the Leader Behavior Description Questionnaire to assess the perception and expectation, they found that both students and department heads expected more - leadership from the dean than they perceived in practice and cited the need for greater communication between their positions as the factor which could reduce the discrepancy. ${ }^{117}$

Development of Leader Behavior Description Questionnaire...Form XII

It had not seemed reasonable to believe that two factors were sufficient to account for all the observable variance in leader Behavior. However, as Shartle (1957) observed, no theory was available to suggest additional factors. ${ }^{118}$ A new theory of role differentiation and group achievement by Stogdill (1959), and the survey of a large body of reseach
data which supported that theory, suggested that a number of variables operate in the differentiation of roles in social groups. ${ }^{119}$ Possible factors suggested by the theory are the following: Tolerance of Uncertainty, Persuasiveness, Tolerance of Freedom, Predictive Accuracy, Integration of the Group, and Reconciliation of Conflicting Demands. Possible new factors suggested by the results of empirical research were the following: Representation of Group Interests, Role Assumption, Production Emphasis, and Orientation toward Superiors. ${ }^{120}$ Items were developed for the hypothesized subscales. Questionnaires incorporating the new items were administrated to successive groups. After item analysis, the questionnaire was revised, administered again, reanalyzed and revised. ${ }^{121}$

The first study which used the new scale was conducted by Marder (1960). He studied members of an army airborne division and members of a state highway patrol organization. ${ }^{122}$ Stogdill studied ministers, leaders in a community development, United States Senators, and Presidents of corporation. ${ }^{123,124,} 125$

Stogdill (1965) has used the new scale in the study of industrial and governmental organization ${ }^{126}$ Stogdill (1965) summarized some of the findings of this study as follows:

1. The leader behavior of superiors is related to the satisfaction of employee expectation. Supervisory consideration is related to employee satisfactions with freedom on the job. Supervisory structuring of expectations is related to employee satisfaction with the company. In a few types of organizations, considerateness is related to satisfaction with the company, and structuring is related to satisfaction with freedom on the job.
2. The leader behavior of supervisors is not highly related to group performance. When such relationships are found, Consideration is related to group drive and freedom, while structuring is related to group loyalty to the company. Neither pattern of supervisory behavior is consistently related to group productivity.
3. Supervisory delegation is related to group drive.
4. Employee satisfaction with freedom on the job is related to group drive and enthusiasm. Other aspects of employee satisfaction bear little consistent relationship to group performance.
5. Group volume or out put tends to be negatively related either to work group cohensiveness or to organizational cohesiveness. 127

A study was conducted by 01afson (1969) in which he compared junior college and university department leadership in physical education. His study revealed that department chairmen as a group and faculty members as a group did not differ significantly on any of the leader behavior subscales of the Leader Behavior Description Questionnaire ...Form XII. The leadership behavior of university department chairmen was perceived to be focused on Demand Reconciliation, Tolerance of Freedom, Persuasiveness, and Production Emphasis. The leadership of junior college department chairmen was perceived as: (1) letting subordinates know what is expected of them; (2) exercising their leadership role and not delegating authority to others; (3) maintaining a closely knit organization in which inter-faculty conflict was minimized; and (4) maintaining cordial, influential relations with superiors. ${ }^{128}$

The role of the principal in the decision-making process was investigated by Larson (1966). His study demonstrcted that principals who characteristically use a formal organizational structure in decisionmaking were perceived by their faculty as being high in the Initiating Structure dimension. Consideration, on the other hand, did not vary according to the formal or informal decision-making procedure employed. The dimension of Representation was related to length of tenure. 129

In a study designed to identify the methods of leadership used in undergraduate physical education departments in the state of Ohio, Douglas (1969) related a modified version of Likerts' Profile of Organizational Characteristics to background information of department chairmen and the
members of their faculty. The results of his study indicated thai: 'he departments surveyed were administered by chairmen who involved their: faculty in a participative form of governace. Significant differences were found between chairmen and faculties with regard to the place in which each group perceived the administrators' present (actual) behavior and where they would like it to be (ideal). These differences were in the direction of a desire for greater faculty participation in governace. Result also indicated no significant differences between the ages of department chairmen and their administrative behavior, but female department chairmen differed significantly from male chairmen by involving more participation in the governace of their department. 130

In a study of leader behavior and cognitive complexity of school superintendents, Kelly (1967), found that a superintendents' level of cognitive complexity correlated with his ability to predict outcomes accurately, and was also related to a superintendents' success in reconciling the conflicting demands of his position. As a general conclusion, Kelly noted that there was a relationship between cognitive complexity and reported leader behavior which involved a threshhold effect rather than a lineal relationship. ${ }^{131}$

Joseph Malik (1968) stated in his study of faculty participation in decision-making in Oregon Community Colleges, that the emerging role of faculty has been a disruptive force in some institutions. ${ }^{132}$

The Leader Behavior Description Questionnaire....Form XII was used in evaluating women in leadership positions (1967), in a study designed by Blanche Norman. She found these women leaders to exhibit relatively high mean scores in Initiating Structure, Consideration, and Tolerance of Freedom, as compared to mean scores of community leaders, ministers and executives of an aircraft corporation. Mean scores also indicated
that leaders could tolerate uncertainty and postponement and could reconcile conflicting demands and maintain cordial relations with supervisors. ${ }^{133}$

Bowman (1964) examined the leader behavior patterns of a selected group of elementary and secondary school principals by means of the Leader Behavior Description Questionnaire....Form XII, and Responsibility, Authority, and Delegation (RAD) Scales. The findings of this study may be summarized as follows:

1. Principals who rated chief school officers higher in Consideration behavior perceived themselves as exercising significantly higher degree of responsibility, authority, and delegation.
2. Significantly higher degrees of authority were associated with principals who rated chief school officers higher on total scores on the Leader Behavior Description Questionnaire....Form XII.
3. Principals tended to rate chief school officers alike on both Initiating Structure and Consideration dimensions.
4. Scores for Consideration were found to be related to scores for Responsibility, Authority, and Delegation, but not to scores for Inititiating Structure. ${ }^{134}$

The relationship between need achievement, need affiliation, and leader behavior was investigated by Rooker (1967). The modified Thematic Appreception Test (TAT) was used to obtain measures for need achievement and need affiliation of elementary school principals and samples of teachers. The self ratings on the Leader Behavior Description Questionnaire Form XII were correlated with their TAT scores. Demand Recociliation and Tolerance of Freedom, as perceived by the teachers, were found to relate to the principals' Need Achievement. As perceived by the principal, only one dimension, Tolerance of Freedom, was found to be related to Need

Achievement, whereas none of the subscales were found to be related to principals' Need Affiliation. The principals' Need Achievement scores were found to be highly associated with the teachers' mean perceptions of the principals' behavior....reconciling demands in the school and permitting teachers latitude for initiative and action. Principals tended to agree among themselves in their perception of the orincipals' behavior. There was no agreement between the two groups, however. as to the nature of the principals' behavior. ${ }^{135}$

Wall (1970) used the Leader Behavior Description Questionnaire... Form XII to study four principals who scored hiah, and four who scored low in dialog, and dec ision-making. Effective principals were described hiaher than ineffective principals in Consideration and Tolerance of Freedom. Ineffec cive principals were described high in Production Emphasis. Teachers in seven of the eight schools believed that principals ought to initiate more structure than they were perceived to do. Teachers in ineffective schools believed that the principals should exhibit more persuasion, demand reconciliation, and integration of the group than they were perceived to do. 136

Mansour (1969) in another study, found that descrepancies between the expected and actual behavior of principals were negatively related to teachers' job satisfaction and participation. ${ }^{137}$

In his study of nonwhite principals with integrated staffs, Schott (1970) found that faculty job satisfaction was highly related to principals' demand reconciliation, tolerance of uncertainty, persuasiveness, tolerance of freednm, role assumption, consideration, predictive accuracy, and integration of the group. ${ }^{138}$

In a study completed by Allen (1971), she identified group leader perceptions of leadership behavior in selected womens' physical education
departments in higher education, using the Leader Behavior Description Questionnaire...Form XII. She , also, measured Leadership Styles, Group Acceptance and Position Power of women physical education administrators, and she identified existing relationships between perceived leader behavior, leadership styles, group atmosphere, and leader position of authority. ${ }^{139}$ Four scales representing seven experimental variables were used: (1) the Leader Behavior Description Ouestionnaire....Form XII, (2) the Least Preferred Coworker Scale, (3) the Group Atmosphere Scale, and (4) the Leader Authority Scale. Among other results, the following were conclusions of importance to the problem under investigation in this study:

1. Administrators do not clearly favor one style of leadership.
2. Leadership style is related to the amount of authority the leadership position has bcen given.
3. Faculty members feel that their leaders' behavior contributes to group atmosphere, but administrators see no relation between the two items:
4. Administrators believe that group atmosphere is more favorable than is thought by faculty nembers,
5. Faculty members do not agree with the extent of authority Possessed by the administrators.
6. Faculty members' perceptions of their administrator's leadership behavior differ significantly from the estimates given the administrators. 140

Carlson (1973) investigated how leaders perceived their behavior compared to their faculties. He used the Leader Behavior Description Questionnaire....Form XII to figure out if there were any discrepencies between the two groups of subiects in relation to social distance, age,
sex, academic rank, extent of formal education and years of experience. He found that there was no significant difference between the chairmens' leadership behavior as self-perceived and perceived by their faculties. There was also a conclusion from the study that bioaraphical factors such as age, sex, academic rank, extent of formal education, and years of experience are not important factors for congruency of perceptions of the chairmens' leader behavior. ${ }^{141}$

Buckiewicz (1974), in her study analyzed group and leader behavior perceptions of leadership in the community college physical education departments of the state of California, Oregon and Washington. All the dimensions of Leader Behavior Description Questionnaire.....Form XII were used. She concluded that there were no significant differences in perception of leader behavior between male and female leaders. She also found that leader maturity did not seem to affect faculty leader behavior perception greatly; moreover, there were no significant differeces found in educational course work in administration by leader, or state origin of leader. ${ }^{142}$

Thus, the literature was investigated in the area of theories of leadersrip, leadership styles, leadership responsibility and authority, leaders' traits, and related studies....and the research stage prepared for the conduct of this study.
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## CHAPTER III

## METHODS AND PROCEDURES

The procedures followed in this investigation of administrative leadership behavior and authority in departments of physical education in colleges and universities in the United States are presented in this chapter.

## Selection of Survey Instruments

Two questionnaire scales representing thirteen experimental variables were employed in this investigation. The Leader Behavior Description Questionnaire....Form XII, and the Leader Authority Scale were used in this study.

## Leader Behavior Description Questionnaire......Form XII

The Leader Behavior Description Questionnaire....Fo m XII was selected to measure twelve dimensions or subscales of leader behavior. The original form was developed by staff members at the Ohio State University for the purpose of describing behavior objectively in terms of its frequency of occurrence. The descriptive items can be used by a subject to describe his/her own behavior, or they can be used by one or more observers to describe the behavior of another person. ${ }^{143}$ Form XII of Leader Behavior Description Questionnaire was developed by Stogdill from the original form of Leader Behavior. Form XII contains twelve dimensions. A description of the behaviors associated with each dimen-
sion or subscale along with the items related to each dimension follows
as they appear in the directions for use of the questionnaire.

1. Representation: speaks and acts as the representative of the group. This dimension consists of five items. The reliability was .694 for nine sample groups consisting of 943 subjects. The items of this dimension were:
$1-1$. Acts as the spokeperson of the group.
1-2. Publicizes the activities of the group.
1-3. Speaks as the representative of the group.
1-4. Speaks for the group when visitors are present
1-5. Represents the group at outside meetings.
2. Demand Recociliation: reconciles conflicting demands and reduces disorder to system. The reliability was .715 for six sample groups of 468 supjects. This dimension consisted of five items which wepe:
2-1. Handles complex problems efficiently.
2-2. Gets swamped by details.*
2-3. Gets things all tangled up.*
2-4. Can reduce a madhouse to system and order.
2-5. Gets confused when too many demands are made of him/her.
3. Tolerance of Uncertainty: is able to tolerate uncertainty and postponement without anxiety or becoming upset. The reliability was . 775 for nine sample groups of 943 subjects. This subscale consisted of ten items as follows:
3-1. Waits patiently for the results of a decision.
$3-2$. Became anxious when he/she cannot find out what is coming next.*
3-3. Accepts defeat in stride.
3-4. Accept.s delays without becoming upset.
$3-5$. Became anxious when waiting for new development.
3-6. Is able to tolerate postponement and uncertainty.
3-7. Can wait just so long, then blows up.*
3-8. Remains $c{ }^{1} m$ when uncertain about coming events.
$3-9$. Is able to lelay action until the proper time occurs.
3-10. Worries abc $1 t$ the outcome of any new procedure.*
4. Persuasiveness: uses persuasion and argument effectively; exhibits strong convictions. The reliability was .796 for nine sample groups of 943 subjects. This dimension consisted of ten items which were:
4-1. Makes pep talks to stimulate the group.
4-2. His/her arguments are convincing.
4-3. Talks persuasively for his/her point of view.
4-4. Is a very persuasive talker.
4-5. Is very skillful in an argument.
4-6. Is not a very convincing talker.*
4-7. Speaks from a strong inner conviction.
4-8. Is an inspiring talker.
4-9. Persuades others that his/her ideas are to their good.
4-10. Can inspire enthusiasm for a project.
5. Initiation Structure: clearly defines own role, and lets followers know what is expected. The reliability was .756 for nine groups of 943 subjects. This dimension consisted of ten items as follows:
5-1. Lets group members know what is expected of them.
5-2. Encourages the use of uniform procedures.
5-3. Tries out his/her ideas in the group.
5-4. Makes his/her attitude clear to the group.
5-5. Decides what shall be done and how it shall be done.
5-6. Assigns group membors to particular tasks.
5-7. Makes sure that his/her part in the group is understood by the group members.
$5-8$. Schedules the work to be done.
5-9. Maintains definite standards of performance.
$5-10$. Asks that group members follow standard rules and regulations.
6. Tolerance of Freedom: allows followers scope for initiative, decision and action. The reliability was .762 for nine sample groups of 943 subjects. This dimension consisted of ten items as follows:
6-1. Allows the members complete freedom in their work.
$6-2$. Permits the members to use their own judgment in solving problems.
6-3. Encourages initiative in group members.
6-4. Lets the members do their work the way they think best.
$6-5$. Assigns task, then lets the members handle it.
$6-6$. Turns the members loose on a job, and lets them go to it.
6-7. Is reluctant to allow the members any freedom of action.*
6-8. Allows the group a high degree of initiative.
6-9. Trusts members to exercise good judgment.
$6-10$. Permits the group to set its own pace.
7. Role Assumption: actively exercises the leadership role rather than surrendering leadership to others. The reliability was .771 for nine sample groups of 943 subjects. This dimension consisted of ten items as follows:
7-1. Is hesitant about taking initiative in the group.*
7-2. Fails to take necessary action.*
7-3. Lets other persons take away his/her leadership in the group.*
7-4. Lets some members take advantage of him/her.*
$7-5$. Is the leader of the group in name only.*
7-6. Backs down when he/she ought to stand firm.*
7-7. Lets some members have authority that he/she should keep.*
7-8. Takes full charge, when emergencies arise.
7-9. Overcomes attempt's made to challenge his/her leadership.
$7-10$. Is easily recognized as the leader of the group.
8. Consideration: regards the comfort, well beina status,
and contributions of followers. The reliability was . 812
for nine sample groups of 943 subjects. This dimension consisted of ten items as follows:
$8-1$. Is friendly and approachable.
8-2. Does little things to make it pleasant to be a member of the group.
8 -3. Puts suggestions made by the group into operation.
8 -4. Treats all group members as his/her equals.
$8-5$. Gives advance notice of change.
8-6. Keeps to him/her.*
8-7. Looks out for the personal welfare of group members.
$8-8$. Is willing to make changes.
8-9. Refuses to explain his/her actions,*
$8-10$. Acts without consulting the group.*
9. Production Emphasis: applies pressure for productive output. The reliability was .682 for nine sample groups of 943 subjects. This dimension consisted of ten items as folTows:
9-1. Encourages overtime work.
9.2. Stresses being ahead of competing groups.

9-3. Needles members for greater effort.
9-4. Keeps the work moving at a rapid pace.
9-5. Pushes for increased production.
9-6. Asks the members to work harder.
9-7. Permits the members to take it easy in their work.*
9-8. Drives hard when there is a job to be done.
9-9. Urges the group to beat its previous record.
9-10. Keeps the group working up to capacity.
10. Predictive Accuracy: exhibits forsight and ability to predict outcomes accurately. The reliability was .806 for seven sample groups of 844 subjects. This dimension consisted of five items as follows:
10-1. Makes accurate decisions.
10-2. Seems able to predict what is comming next.
10-3. Things usually turn out as he/she predicts.
$10-4$. Is accurate in predicting the trend of events.
$10-5$. Anticipates problems and plans for them.
11. Integration: maintains a closely knit organization; resolves inter-member conflicts. The reliability was .760 for two sample groups of 420 subjects. This dimension consisted of five items as follows:
11-1. Keeps the group working together as a team.
11-2. Settles conflicts when they occur in the group.
11-3. Sees to it that the work of the group is coordinated.
11-4. Helps group members settle their differences.
11-5. Maintains a closely knit group.
12. Superior Orientation: maintains cordial relations with superior; has influence with them; is striving for higher status. The reliability was .692 for five samnle groups of 695 subjects. This dimension consisted of ten items as follows: 12-1. Gets along well with the people above him/her.

12-2. Keeps the group in good standing with higher authority.
12-3. Is working hard for a promomtion.
12-4. His/her superior acts favorably on most of his/her suggestions.
12-5. Enjoys the privileges of his/her position.
12-6. Gets his/her superiors to act for the welfare of the group members.
12-7. His/her word carries weight with superior.
12-8. Gets what he/she asks for from his/her superior.
12-9. Is working his/her way to the top.
12-10. Maintains cordial relations with superiors. ${ }^{144}$
The reliability for the twelve dimensions mentioned previously was determined by a modified Kuder-Richardson Formula, which yielded a conservative estimate of subscale reliability. The subjects were asked to select a number from one to five for each dimension or statement, the higher indicating greatest disagreement with the described behavior. Items were scored: $A=5, B=4, C=3, D=2, E=1$. By summing the point value of the selected responses, a single score for responses to the items of each subscale was obtained. Each statement marked with a star is the score the reverse way, such as: $A=1, B=2, C=3, D=4, E=5$. Leaders responded in terms of their perceptions of their own behavior, and faculty members responded in terms of their perceptions of their leader's behavior. Twelve scores were obtained for each leader and faculty member. One score for each of the dimensions.

The Leader Behavior Description Questionnaire....Form XII was selected because it provided the only behavior subscale found in the literature which appeared appropriate for the purposes of this investigation. A copy of the questionnaire used in this study is included in Appendix A.

Leader Autnority Scale

The authority avialable to the departmental leader might vary from
in,titution to institution. Also, there may be some difference in the wav the administrator wants or chooses to use his/her authority. Because of significance of authority in accomplishing the goals and objectives of an organization, the authority which exists in positions of leadership was identified.

A serarch of the literature revealed that there has been very little published concerned with the problem of authority measurement. Fiedler and Hunt developed a scale of authority power which was used in this investigation. The scale consisted of eighteen items which indicated the power of position. The items of the Authority Scale were as follows:

1. Coml iments from the leader are appreciated more than compliments from other group members.
2. Compliments are highly valued, criticisms are considered damaging.
3. Leader can recommend punishments and rewards.
4. Leader can punish or reward members on his/her own accord.
5. Leader can effect (or can recommend) promotion or demotion.
6. Leader chairs or coordinates group but may or may not have other advantages. i.e., is appointed or acknowledged chairman or leader.
7. Leaders' opinion is accorded considerable respect and attencion.
8. Leaders' special knowledge or information (and members' lack of it) permits leader to decide how task is to be done or how group is to proceed.
9. Leader cues members or instructs them on what to do.
10. Leader tells or directs members what to do or what to say.
11. Leader is expected to motivate group.
12. Leader is expected to suggest and evaluate the members work.
13. Leader has superior or special knowledge about the job, or has special instructions but requires members to do job.
14. Leader can supervise each member's job and evaluate it or correct it.
15. Leader knows his/her own as well members' job and could finish the work himself/herself, if necessary. e.g., writing a report for which all information is available.
16. Leader enjoys special or official rank and status in real life which sets him/her apart from or above group members,
e.g., military rank or elected office in a company or organization.
17. Leader is given special or official rank by experimenter to simulate for role-playing purposes, e.g., "You are a general" or "Manager." This simulated rank must be clearly superior to members' rank and must not be just that of "chairman" or "group leader" of the group during its work period.
18. Leader's position is dependent on members; members can replace or depose leader.

The sum of the checked items provides a highly reliable scale for measuring leader position power. All items could be answered with a "Yes" or "No" response. The reliability of this scale was .95 among four judges rating thirty five tasks. ${ }^{145}$

Selection of Subjects and Institutions

A list of names and addresses of 245 members of the Colleges and Universities Administrators Council of the American Alliance of Health, Physical Education, Recreation and Dance was used in selecting the subjects of this study along with the Directory of Physical Education programs indicating the institutional size. The list was divided into four geographical areas: north, south, east and west. A list of institutions for all geographical areas will be found in Appendix B. Twenty institutions were randomly selected from each geographical area as samples. Each area was divided into four college or university enrollment categories according to the enrollment score indicated in the Directory of Physical Education programs.

The first category included institutions with an enrollment of 2040 thousand students. The second category included institutions with an enrollment of $10-20$ thousand students. The third category included institutions with an enrollment of 5-10 thousand students. The fourth category included institutions with an enrollment of five thousand students
or less. These categories have been used to allow for differences that might exist in the perception of the leader behavior and authority among the different sizes of the institutions. The sex of the leaders was not considered in the selection of the subjects.

The only requirement for selecting institutions to be part of this study was that there should be at least three full-time faculty members in the department of physical education. Also, it was required that the head of the department should have served a minimum of one full year in that position. The final sample included 80 institutions which included 80 department leaders and 240 faculty members.

## Procedures of Collecting of Data

The following procedures were used for collecting the data:

1. A solicition letter that included information about the research and the researcher was sent to the leaders of the department of physical education in each selected institution. The letter explained the purposes of the study and asked for the leaders' cooperation. If the leader agreed to participate, he/she then was asked to send a list of his/her faculty members' names to assist in the randon selection of a minimum of three full-time faculty members to include in the study.
2. No particular name was required from correspondent.
3. Each leader received a self-addressed stamped envelop for responding.
4. Each faculty members who was randomly selected received thequestionnaire forms through their mail.
5. Each.faculty member was asked to mail his/her own completed form directly to the investigator.
6. Each leader received the questionnaire along with a self-
addressed stamped envelop for responding.
7. All forms were coded on the front pages and a duplicate number was placed on the attached envelope. The code was necessary to distinguish between leader and faculty members' responses and to identify institutional affiliation.
8. Two weeks later, a letter was sent to those leaders which had not replied, requesting them to respond as soon as possible.
9. A letter of personal appreciation was mailed to those leaders who participated in the investigation, for their cooperation. A copy of all correspondence materials along with all permission letters from publishers will be found in Appendix $A$.

## Statistical Analysis and Purposes

The analysis of data in this study included four statistical applications: (1) frequency analysis, (2) two-tailed t-ratio tests for difference between means, (3) one-way analysis of variance for difference among means, and (4) Duncan's multiple range test for location of specific significant differences in comparisons of F-ratios of the responses. Questionnaire responses were recorded on IBM files and computation was accomplished primarily by the IBM 3081D computer, housed at the OkTahoma State University Computer Center.

## Frequency Analysis

The SAS computer program was used to compute frequency, distribution of scores, means, standard deviations, maximum and minimum values of scores, sums of squares, and ranges of all scores obtained from faculty members and letters of each of the eighty institutions in this study.

Two-Tailed t-Ratio Test

The SAS (T-TEST) computer program was used to determine the significance of difference between:

1. The leaders' mean and the mean of the faculty members for each subscale.
2. The leaders' mean and the mean of the faculty members for each enrollmen't category.

One-Way Analysis of Variance

The SAS (ONE-WAY) computer program was used to determine if there was a significant difference in the means of faculty members as one group and the means of leaders as one group in their responses for each dimension in the questionnaire

## Duncan's Multiple Range Test

All significant F-ratios were tested to determine the location of the significance. This test was selected because it could accommodate F-ratios which had been derived from group scores containing different sizes of institutions.

All t-ratios and F-ratios were tested at . 05 level of significance.
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## CHAPTER IV

## RESULTS AND DISCUSSION

The results of this study of leader behavior and authority of physical education departments in colleges and universities in the United States of America are presented in this chapter. The analysis of data was divided into two parts: (1) leadership behavior, and (2) leadership authority. The first part was analyzed according to a set of subproblems, which were as follows:

1. What are the leaders' responses to each element of the Leader Behavior Description Questionnaire....Form XII?
2. What are the faculty members' responses to each element of the Leader Behavior Description Questionnaire....Form XII?
3. How do leaders' responses compare with those given by the faculty members to each element of the Leader Behavior Description Questionnaire....Form XII?
4. How do the responses by leaders and faculty members from institutions of the same size and the responses given by the leaders and the faculty members from institutions of different size compare to each subscale of the Leader Behavior Description Questionnaire....Form XII?

The leader authority was analyzed according to the following subproblems:

1. What are the leaders' responses to the Leader Authority Scale?
2. What are the faculty members' responses to the Leader Authority Scale?
3. How do leaders' responses compare with those responses given by the faculty members on the Leader Authority Scale?
4. How do leaders and faculty members' responses from institutions of the same size and those given by the leaders and faculty members from institutions of different sizes compare on the Leader Authority Scale?

The analysis of data in this study was examined using the following statistical applications: (1) frequency analysis, (2) two-tailed t-ratio test, (3) one-way analysis of variance, and (4) Duncan's multiple range test.

## Leader Behavior

The Leader Behavior Description Questionnaire....Form XII was used to obtain data about perceptions of leadership behavior. ${ }^{146}$ The questionnaire was sent and completed by 80 leaders and 240 faculty members included in this investigation. The twelve dimensions of leader behavior examined were: Representation, Demand Reconciliation, Tolerance of Uncertainty, Persuasiveness, Initiation of Structure, Tolerance of Freedom, Role Assumption, Consideration, Production Emphasis, Predictive Accuracy, Integration, and Superior Orientation.

## Leaders' Responses

Means, standard deviations, minimum values, maximum values, and ranges of the responses of the sample of leaders appear in Table I. The highest mean score was 36.88 and occurred in the Initiation of Structure leader behavior dimension. The lowest mean score was 16.81 and occurred in the Demand of Reconciliation leader behavior dimension. The greatest range of score was 33, which occurred in the Tolerance of Freedom dimension, indicating that administrators perceive themselves as exhibiting a

TABLE I
MEANS, STANDARD DEVIATIONS, MINIMUM VALUES, MAXIMUM VALUES, AND RANGES OF LEADERS RESPONSES TO LBDQ...FORM XII

| VARIABLE <br> NAME | $N$ | MEAN | STANDARD <br> DEVIATION | MINIMUM <br> VALUE | MAXIMUM <br> VALUE | RANGE |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| REPRESENTATION | 80 | 19.60 | 2.12 | 13 | 23 | 10 |
| RECONCILIATION | 80 | 16.81 | 3.66 | 9 | 22 | 13 |
| TOL. UNCERTAIN. | 80 | 31.51 | 6.38 | 17 | 41 | 24 |
| PERSUASIVENESS | 80 | 33.11 | 7.31 | 16 | 43 | 27 |
| INITIA. STRUCT. | 80 | 36.88 | 5.30 | 24 | 46 | 22 |
| TOL. FREEDOM | 80 | 35.86 | 8.73 | 15 | 48 | 33 |
| ROLE. ASSUMPT. | 80 | 36.51 | 5.15 | 23 | 47 | 24 |
| CONSIDERATION | 80 | 34.13 | 7.80 | 16 | 44 | 28 |
| PRODUCTION EMPH. 80 | 33.66 | 4.94 | 16 | 41 | 25 |  |
| PREDICTIVE ACCUR.80 | 17.56 | 2.93 | 10 | 21 | 11 |  |
| INTEGRATION | 80 | 17.13 | 4.49 | 8 | 23 | 15 |
| SUPERIOR ORIEN. | 80 | 36.18 | 4.77 | 26 | 45 | 19 |

LBDQ..FORM XII, refer to Leader Behavior Description Questionnaire.... Form XII.
greater variety of behavior associated with their own role definition or letting their followers scope for initiative, decision, and action, and let followers know what is expected from them. The standard deviation of 8.73 for responses to the Tolerance of Freedom leader behavior dimen.sion was the largest. The smallest standard deviation was 2.12 for the Representation leader behavior dimension. In general, the leaders rated themselves higher than their faculty members rated them on the eight dimensions of the leader behavior questionnaire. The leaders' mean score on these eight dimensions was above the mean score of their faculty members. The eight dimensions which the leaders rated themselves higher than their faculty members were: Representation, Demand Reconciliation, Initiation of Structure, Role Assumption, Production Emphasis, Predictive Accuracy, Integration, and Superior Orientation. These dimensions indicated that the leaders speak and act as the representative of the group, reconcile conflicting demands and reduce disorder to systems, clearly defined their own role. Followers knew what was expected of them. Leaders actively exercised their leadership role rather than surrendering leadership to others, applied pressure for productive output, exhibited foresight and ability to predict outcomes accurately, maintained closely knit organization, resolved intermember conflicts, maintained cordial relations with superiors, had influence on followers and strived for higher status.-. Although the need for other dimensions of leader behavior is recognized, the leaders apparrntly believed in different leadership approaches renending upon the situation.

## Faculty Members' Responses

Means, standard deviations, minimum and maximum values, and ranges of the responses of the sample of faculty members to the Leader Behavior

TABLE II
MEANS, STANDARD DEVIATIONS, MINIMUM VALUES, MAXIMUM VALUES, RANGES OF FACULTY MEMBERS RESPONSES TO LBDQ....FORM XII

| VARIABLE <br> NAME | N MEAN | STANDARD <br> DEVIATION | MINIMUM <br> VALUE | MAXIMUM <br> VALUE | RANGE |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :--- |
| REPRESENTATION | 240 | 19.13 | 2.85 | 12 | 25 | 13 |
| RECONCILIATION | 240 | 16.47 | 3.25 | 6 | 23 | 17 |
| TOL. UNCERTAIN. 240 | 32.47 | 5.02 | 12 | 43 | 31 |  |
| PERSUASIVENESS | 240 | 33.51 | 5.69 | 20 | 45 | 25 |
| INITI. STRUCT. | 240 | 35.77 | 6.62 | 20 | 47 | 27 |
| TOL. FREEDOM | 240 | 37.14 | 6.68 | 21 | 49 | 28 |
| ROLE ASSUMP. | 240 | 32.84 | 5.92 | 19 | 48 | 29 |
| CONSFPERATION | 240 | 34.40 | 5.85 | 17 | 48 | 29 |
| PRODUC. EMPHA. | 240 | 32.91 | 5.05 | 20 | 50 | 30 |
| PREDICT. ACCUR. 240 | 16.56 | 2.83 | 8 | 24 | 16 |  |
| INTEGRATION | 240 | 16.28 | 3.97 | 5 | 25 | 20 |
| SUPER. ORIEN. | 240 | 33.57 | 5.84 | 14 | 44 | 30 |

LBDQ..FORM XII, refer to the Leader Behavior Description Questionr ire Form XII.

Description Questionnaire....Form XII appear in iable II. The highest mean score of 37.14 was found in the Tolerance of Freedom leader behavior dimension. This mean score was 1.26 points above the mean score of the mean score of the same dimension of leader behavior scored by the leader, 35.86. The lowest mean score was 16.28 for the Integration dimension of leader behavior. This indicated that faculty members did not perceive their leaders as individuals who maintain a closely knit organization and resolve intermember conflicts. The largest standard deviation was 6.68, which was for the Tolerance of Freedom dimension scale, and the s̊mallest standard deviation was 2.83 , which was for Predictive Accuracy dimension.

Faculty members' high scores were higher than the leaders' score on the four dimensions of the leader behavior scale. These four subscales were Tolerance of Freedom, Tolerance of Uncertainty, Persuasiveness, and Consideration. The score of the faculty members on these dimensions indicated that faculty members perceived their leaders as those who are able to tolerate uncertainty and postponement without anxiety or being upset, allowed followers scope for initiative, decision, and action, used persuasion and argument effectively, exhibited strong convictions, and were concerned with the comfort, well being and contributions of the followers. Faculty members generally viewed their leaders' behavior as more social than the leaders perceived themselves. The faculty did not rate their leaders as the leaders rated themselves. Figure 1 shows the difference between the mean scores of leaders and the mean scores of the faculty members for all the twelve dimensions of the Leader Behavior Description Questionnaire....Form XII.

A two-tailed t-test of significance was computed between the leaders' mean score as a group and the faculty members'. mean scores taken as a group on each dimension of the leader behavior questionnaire. Table III summarizes the results of the comparison and represent the leader behavior dimensions which were found significantly different at .05 level of significance between the mean scores of the leaders and the mean scores of the faculty members.

A significant difference at the .05 level of significance was found between the responses of the leaders and faculty members in the following three dimensions: Role Assumption, Predictive Accuracy, and Superior Orientation. For the rest of the leader behavior dimensions, there was no significant different at . 05 level of significance between the mean scores of the responses.

When the differences were examined, faculty members' mean scores were higher on the Tolerance of Uncertainty, Persuasiveness, Tolerance of Freedom, and Consideration, but lower on the Representation, Demand Reconciliation, Initiation of Structure, Role Assumption, Production, Emphasis, Predictive Accuracy, and Superior Orientation.

Comparison of Leaders and Faculty Members' responses from Institutions of Different Sizes

To determine the extent of differences in leaders and faculty members' perceptions, from institutions of different sizes, on the leader's behavior, a two-tailed t-test was performed for each of the twelve leader behavior variables. The results of these analyses appear in Table IV.

## MEAN SCORE POINTS

REPRESENTATION

RECONCILIATION

TOL. UNCERTAINTY

PERSUASIVENESS

INITIA. STRUCTURE

TOL. FREEDOM

ROLE ASSUMPTION

CONSIDERATION

PRODUC. EMPHASIS

PREDICT: ACCUR.

INTEGRATION

SUPERIOR ORIENT.


* and Solid line= Leaders,
- and Cut line= Faculty members.

Figure 1. The Mean Score of the Leaders and Faculty Members Responses to the Leader Behavior Description Questionnaire....Form XII

TABLE III
COMPARISON TABLE BETWEEN MEAN SCORES OF LEADERS AND FACULTY MEMBERS TO LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE. . . FORM XII

| VARIABLE NAME | GROUP | $N$ | MEAN | STANDARD DEVIATION | RANGE | $\stackrel{\top}{\text { VALUE }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REPRESENTATION | F | 240 | 19.13 | 2.85 | 13 | -1.55 |
|  | L | 80 | 19.60 | 2.12 | 10 | -1.34 |
| RECONCILIATION | F | 240 | 16.47 | 3.25 | 17 | -0.72 |
|  | L | 80 | 16.81 | 3.66 | 13 | -0.76 |
| TOL. UNCERTAIN. | F | 240 | 32.47 | 5.02 | 31 | 1.22 |
|  | L | 80 | 31.51 | 6.38 | 24 | 1.37 |
| PERSUASIVENESS | F | 240 | 33.51 | 5.69 | 25 | 0.44 |
|  | L | 80 | 33.11 | 7.31 | 27 | 0.50 |
| INITIA. STRUCT. | F | 240 | 35.77 | 6.62 | 27 | -1. 52 |
|  | L | 80 | 36.88 | 5.30 | 22 | -1.36 |
| TOL. FREEDOM | F | 240 | 37.14 | 6.68 | 28 | 1.20 |
|  | L | 80 | 35.86 | 8.73 | 23 | 1.37 |
| ROLE ASSUMPT. | F | 240 | 32.84 | 5.92 | 29 | -5.29* |
|  | L | 80 | 36.51 | 5.15 | 24 | -4.94* |
| CONSIDERATION | F | 240 | 34.40 | 5.84 | 31 | 0.28 |
|  | L | 80 | 34.13 | 7.80 | 28 | 0.32 |
| PRODUCTION EMPHA. | F | 240 | 32.91 | 5.05 | 30 | -1.16 |
|  | L | 80 | 33.66 | 4.49 | 25 | -1.15 |
| Predictive Accur. | F | 240 | 16.56 | 2.83 | 16 | -2.64* |
|  | L | 80 | 17.56 | 2.93 | 11 | -2.69* |
| INTEGRATION | F | 240 | 16.28 | 3.97 | 20 | -1.51 |
|  | L | 80 | 17.13 | 4.49 | 15 | -1.61 |
| SUPERIOR ORIENT. | F | 240 | 33.57 | 5.85 | 30 | -4.00* |
|  | L | 80 | 36.18 | 4.77 | 19 | -3.61* |

[^0]TABLE IV
COMPARISON TABLE BETWEEN MEAN SCORES OF LEADERS AND FACULTY MEMBERS RESPONSES IN INSTITUTIONS SIZE FIVE THOUSAND STUDENTS OR LESS TO LBDQ....FORM XII

| VARIABLE <br> NAME | GROUP | N | MEAN | STANDARD <br> DEVIATION | RANGE | T |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| VALUE |  |  |  |  |  |  |

* Significant at . 05 level of significance.
$F$, is faculty member.
$L$, is leader.
LBDQ...Form XII, refer to Leader Behavior Description Questionnaire... Form XII.

The t-ratios for seven of the following twelve leader behavior dimensions were significantly different at . 05 level of significance in the institutions with an enrollment of five thousand students or less.

## Representation

There was no significant difference found between the leaders' mean score of 19.85 and the faculty members' mean score of 19.15 in the institutions with an enrollment of five thousand students or less. Demand Reconciliation

There was no significant difference found between the leaders' mean score of 17.65 and the faculty members' mean score of 16.83 in institutions with an enrollment of five thousand students or less. Tolerance of Uncertainty

There was no significant difference found between the leaders' mean score of 32.25 and the faculty members' mean score of 33.38 in institutions with an enrollment of five thousand students or less. Persuasiveness

There was no significant difference found between the leaders' mean score score $? 33.40$ and the faculty members' mean score of 33.90 in the institutions with an enrollment of five thousand students or less.

## Initiation of Structure

There was a significant difference at . 05 level of significance found between the leaders' mean score of 39.00 and the faculty members' mean score of 36.10 in the institutions with an enrollment of five thousand students or less.

Tolerance of Freedom
There was no significant difference found between the leaders'
mean score of 39.55 and the faculty members' mean score of 37.63 in institutions with an enrollment of five thousand students or less. Role Assumption

There was a significant difference at . 05 level of significance found between the leaders' mean score of 37.05 and the faculty members' mean score of 33.80 in the 33.80 in the institutions with an enrollment of five thousand students or less.

## Consideration

There was a significant difference at . 05 level of significance found between the leaders' mean score of 38.75 and the faculty members' mean score of 34.41 in the institutions with an enrollment of five thousand students or less.

## Production Emphasis

There was a significant difference at . 05 level of significance found between the leaders' mean score of 35.30 and the faculty members' mean score of 31.86 in the institutions with an enrollment of five thousand students or less.

## Predictive Accuracy

There was a significant difference at . 05 level of significance found between the leaders' mean score of 18.80 and the faculty members' mean score of 16.80 in the institutions with an enrollment of five thousand students or less.

Integration
There was a significant difference at . 05 level of significance found between the leaders' mean score of 18.90 and the faculty members' mean score of 17.15 in the institutions with an enrollment of five thousand students or less.

## Superior Orientation

There was a significant difference at . 05 level of significance found between the leaders' mean score of 36.60 and the faculty members' mean score of 34.31 in the institutions with an enrollment of five thousand students or less.

Leaders and faculty members in institutions with an enrollment of five thousand to ten thousand students were scored differently on the Leader Behavior Description Questionnaire....Form XII, from the institutions previously mentioned. Table $V$ shows the results of the institutions with an enrollment of five thousand to ten thousand students. Representation

There was no significant difference found between the leaders' mean score of 18.65 and the faculty members' mean score of 18.83 in the institutions with an enrollment of five thousand to ten thousand students. Demand Reconciliation

There was no significant difference found between the leaders' mean score of 17.55 and the faculty members' mean score of 16.05 in the institutions with an enrollment of five thousand to ten thousand students. Tr?erance of Uncertainty

There was no significant difference found between the leaders' mean score of 34.10 and the faculty members' mean score of 32.05 in the institutions with an enrollment of five thousand to ten thousand students. Persuasiveness

There was no significant difference found between the leaders' mean score of 34.85 and the faculty members' mean score of 32.75 in the institutions with an enrollment of five thousand to ten thousand students. Initiation of Structure

There' was no significant difference found between the 1 leaders'

TABLE V
COMPARISON TABLE BETWEEN MEAN SCORES OF LEADERS AND FACULTY MEMBERS IN INSTITUTIONS SIZE FIVE THOUSAND TO TEN THOUSAND STUDENTS TO LBDQ....FORM XII

| VARIABLE <br> NAME | GROUP | N | MEAN | STANDARD <br> DEVIATION | RANGE | T |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| REPRESENTATION | F | 60 | 18.83 | 2.45 | 10 | 0.34 |
|  | L | 20 | 18.65 | 1.89 | 7 | 0.30 |
| RECONCILIATION | F | 60 | 16.05 | 3.76 | 16 | -1.88 |
|  | L | 20 | 17.55 | 2.81 | 10 | -1.63 |
| TOL. UNCERTAINT. | F | 60 | 32.05 | 4.27 | 17 | -1.66 |
|  | L | 20 | 34.10 | 4.93 | 17 | -1.78 |
| PERSUASIVENESS | F | 60 | 32.75 | 5.65 | 22 | -1.83 |
|  | L | 20 | 34.85 | 3.93 | 15 | -1.53 |
| INITI. STRUCTURE | F | 60 | 36.50 | 5.63 | 23 | -0.72 |
|  | L | 20 | 37.60 | 5.97 | 22 | -0.74 |
| TOL. FREEDOM | F | 60 | 37.78 | 5.42 | 23 | -0.12 |
|  | L | 20 | 37.60 | 5.51 | 17 | -0.13 |
| ROLE ASSUMPTION | F | 60 | 33.00 | 4.71 | 18 | -1.62 |
|  | L | 20 | 35.15 | 5.23 | 18 | -1.71 |
| CONSIDERATION | F | 60 | 33.15 | 6.05 | 27 | -1.26 |
|  | L | 20 | 35.10 | 5.91 | 21 | -1.25 |
| PRODUCTION EMPHA. | F | 60 | 33.30 | 5.44 | 26 | 1.87 |
| L | 20 | 31.20 | 3.88 | 14 | 1.59 |  |
| PREDICTIVE ACCUR. | F | 60 | 16.76 | 2.77 | 12 | -1.17 |
|  | L | 20 | 17.60 | 2.74 | 9 | -1.16 |
| INTEGRATION | F | 60 | 16.48 | 3.73 | 15 | -1.17 |
| SUPERIOR ORIENT. | F | 60 | 34.01 | 4.69 | 21 | $-2.35 *$ |
|  | L | 20 | 36.80 | 4.54 | 16 | $-2.31 *$ |
|  |  |  |  |  |  |  |

* Significant at . 05 level of significance.
$F$, is faculty member.
$L$, is leader.
LBDQ..Form XII, is the Leader Behavior Description Questionnair...Form XII.
mean score of 37.60 and the faculty members' mean score of 36.50 in the institutions with an enrollment of five thousand to ten thousand students. Tolerance of Freedom

There was no significant difference found between the leaders' mean score of 37.60 and the faculty members' mean score of 37.78 in the institutions with an enrollment of five thousand to ten thousand students. Role Assumption

There was no significant difference found between the leaders' mean score of 35.15 and the faculty members' mean score of 33.00 in the institutions with an enrollment of five thousand to ten thousand students. Consideration

There was no significant difference found between the leaders' mean score of 35.10 and the faculty members' mean score of 33.15 in the institutions with an enrollment of five thousand to ten thousand students. Production Emphasis

There was no significant difference found between the leaders' mean score of 31.20 and the faculty members' mean score of 33.30 in the institutions with an enrollment of five thousand to ten thousand students. Predictive Accuracy

There was no significant difference found between the leaders' mean score of 17.60 and the faculty members' mean score of 16.76 in the institutions with an enrollment of five thousand to ten thousand students. Integration

There was no significant difference found between the leaders' mean score of 17.55 and the faculty members' mean score of 16.48 in the institutions with an enrollment of five thousand to ten thousand students. Superior Orientation

There was a significant difference at .05 level of significance
found between the leaders' mean score of 36.80 and the faculty members' mean score of 34.01 in the institutions with an enrollment of five thousand to ten thousand students.

The third category of institutions investigated in this study was institutions with an enrollment of ten thousand to twenty thousand students. The mean score of the leaders and their faculty members was also different than the previous two categories. Table VI represents the results of this category of institutions in the following leader behavior dimensions.

## Representation

There was a significant difference found at . 05 level of significance between the leaders' mean score of 20.70 and the faculty' members' mean score of 16.80 in the institutions with an enrollment of ten thousand to twenty thousand students.

## Demand Reconciliation

There was no significant difference found between the leaders' mean score of 16.80 and the faculty members' mean score of 15.40 in the institutions with an enrollment of ten thousand to twenty thousand students.

Tolerance of Uncertainty
There was no significant difference found between the leaders' mean score of 31.75 and the faculty members' mean score of 30.60 in the institutions with an enrollment of ten thousand to twenty thousand students.

## Persuasiveness

There was no significant difference found between the leaders' mean score of 35.85 and the faculty members' mean score of 33.60 in the institutions with an enrollment of ten thousand to twenty thousand
students.
Initiation of Structure
There was no significant difference found between the leaders' mean score of 36.80 and the faculty members' mean score of 34.60 in the institutions with an enrollment of ten thousand to twenty thousand students.

## Tolerance of Freedom

There was no significant difference found between the leaders' mean score of 38.00 and the faculty members' mean score of 35.56 in the institutions with an enrollment of ten thousand to twenty thousand students.

## Role Assumption

There was a significant difference at . 05 level of significance found between the leaders' mean score of 39.10 and the faculty members mean score of 30.10 in the institutions with an enrollment of thousand to twenty thousand students.

## Consideration

There was no significant difference found between the leaders' mean score of 34.25 and the faculty members' mean score of 36.03 in the institutions with an enrollment of ten thousand to twenty thousand students. Production Emphasis

There was no significant difference found between the leaders' mean score of 32.95 and the faculty members' mean score of 31.96 in the institutions with an enrollment of ten thousand to twenty thousand students. Predictive Accuracy

There was no significant difference found between the leaders' mean score of 18.05 and the faculty members' mean score of 16.40 in the institutions with an enrollment of ten thousand to twenty thousand

TABLE VI
COMPARISON TABLE BETWEEN MEAN SCORES OF LEADERS AND FACULTY MEMBERS IN INSTITUTIONS SIZE TEN THOUSAND TO TWENTY THOUSAND STUDENTS TO LBDQ....FORM XII

| VARIABLE <br> NAME | GROUP | N | MEAN | STANDARD <br> DEVIATION | RANGE | T <br> VALUE |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: |
| REPRESENTATION | F | 60 | 18.56 | 3.30 | 9 | $-3.65^{*}$ |
|  | L | 20 | 20.70 | 1.78 | 6 | $-2.75^{*}$ |
| RECONCILIATION | F | 60 | 15.40 | 2.81 | 9 | -1.35 |
|  | L | 20 | 16.80 | 4.33 | 12 | -1.66 |
| TOL. UNCERTAIN. | F | 60 | 30.86 | 6.25 | 26 | -0.51 |
|  | L | 20 | 31.75 | 6.83 | 21 | -0.53 |
| PERSUASIVENESS | F | 60 | 33.60 | 5.70 | 18 | -0.14 |
|  | L | 20 | 33.85 | 7.24 | 24 | -0.15 |
| INITIA. STRUCT. | F | 60 | 34.60 | 8.91 | 27 | -1.41 |
|  | L | 20 | 36.80 | 4.65 | 12 | -1.05 |
| TOL. FREEDOM | F | 60 | 35.56 | 8.24 | 25 | -1.17 |
|  | L | 20 | 38.00 | 7.92 | 23 | -1.15 |
| ROLE ASSUMPT. | F | 60 | 30.10 | 5.55 | 21 | $-9.49 *$ |
|  | L | 20 | 39.10 | 2.77 | 11 | $-6.94 *$ |
| CONSIDERATION | F | 60 | 36.03 | 6.41 | 24 | 0.94 |
|  | L | 20 | 34.25 | 7.59 | 25 | 1.02 |
| PRODUC. EMPHA. | F | 60 | 31.96 | 4.88 | 14 | -0.76 |
|  | L | 20 | 32.95 | 4.99 | 17 | -0.77 |
| PREDICT. ACCUR. | F | 60 | 16.40 | 3.50 | 13 | -2.05 |
|  | L | 20 | 18.05 | 2.96 | 8 | -1.88 |
| INTEGRATION | F | 60 | 15.40 | 4.89 | 18 | -2.01 |
| SUPERIOR ORIENT. | F | 60 | 30.96 | 8.66 | 26 | $-4.03^{*}$ |
|  | L | 20 | 37.50 | 5.22 | 16 | $-3.17 *$ |

* Significant at . 05 level of significance.
$F$, is faculty member
$L$, is leader.
LBDQ..Form XII, is Leader Behavior Description Questionnaire...Form XII.
students.
Integration
There was no significant difference found between the leaders' mean score of 17.80 and the faculty members' mean score of 15.40 in the institutions with an enrollment of ten thousand to twenty thousand students. Superior Orientation

There was a significant difference at•. 05 level of significance found between the leaders' mean score of 37.50 and the faculty members' mean score of 30.96 in the institutions with an enrollment of ten thousand to twenty thousand students.

The last category tested in this investigation was institutions with an enrollment of twenty thousand to forty thousand students. The leaders and their faculty members were scored differently than those in the other three categories on each subscale of the leader behavior. Table VII shows the results of this category, which were:

## Representation

There was no significant difference found between the leaders' mean score of 19.20 and the faculty members' mean score of 19.98 in the institutions with an enrollment of twenty thousand to forty thousand students.

## Demand Reconciliation

There was a significant difference at . 05 level of significance found between the leaders' mean score of 15.25 and the faculty members' mean score of 17.63 in the institutions with an enrollment of wenty thousand to forty thousand students.

Tolerance of Uncertainty
There was a significant difference at . 05 level of significance found between the leaders' mean score of 27.95 and the faculty members'

TABLE VII
COMPARISON TABLE BETWEEN MEAN SCORES OF LEADERS AND FACULTY MEMBERS IN INSTITUTIONS SIZE TWENTY THOUSAND TO FORTY THOUSAND STUDENTS TO LBDQ...FORM XII

| VARIABLE NAME | GROUP | $N$ | MEAN | STANDARD DEVIATION | RANGE | $\stackrel{T}{\text { VALUE }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REPRESENTATION | F | 60 | 19.98 | 2.90 | 13 | 1.09 |
|  | L | 20 | 19.20 | 2.70 | 10 | 1.06 |
| RECONCILIATION | F | 60 | 17.64 | 2.61 | 10 | 2.33* |
|  | L | 20 | 15.25 | 4.30 | 12 | 2.96* |
| TOL. UNCERTAIN | F | 60 | 33.58 | 4.87 | 20 | 3.07* |
|  | L | 20 | 27.95 | 7.68 | 21 | 3.83* |
| PERSUASIVENESS | F | 60 | 33.80 | 5.34 | 20 | 2.40* |
|  | L | 20 | 28.35 | 9.63 | 23 | 3.17* |
| INITIAT. STRUCT. | F | 60 | 35.90 | 6.38 | 25 | 1.20 |
|  | L | 20 | 34.15 | 5.35 | 15 | 1.10 |
| TOL. FREEDOM | F | 60 | 37.40 | 7.49 | 27 | 3.39* |
|  | L | 20 | 28.30 | 11.18 | 26 | 4.12* |
| ROLE ASSUMPTION | F | 60 | 34.48 | 6.50 | 22 | -0.17 |
|  | L | 20 | 34.75 | 5.54 | 18 | -0.16 |
| CONSIDERATION | F | 60 | 34.03 | 5.66 | 21 | 2.58* |
|  | L | 20 | 28.45 | 9.09 | 23 | 3.24* |
| PRODUCT. EMPHA. | F | 60 | 34.51 | 4.54 | 18 | -0.45 |
|  | L | 20 | 35.20 | 6.21 | \% | -0.52 |
| PREDICTIVE ACCUR. | F | 60 | 16.30 | 2.27 | 3 | 0.60 |
|  | L | 20 | 15.80 | 3.45 | 10 | 0.74 |
| INTEGRATION | F | 60 | 16.10 | 3.67 | 11 | 1.37 |
|  | L | 20 | 14.30 | 5.45 | 12 | 1.66 |
| SUPERIOR ORIENT. | F | 60 | 34.96 | 3.78 | 13 | 0.89 |
|  | L | 20 | 33.85 | 5.25 | 15 | 1.04 |

* Significant at . 05 level of significance.
$F$, is faculty member.
$L$, is leader.
LBDQ..Form XII, is Leader Behavior Description Questionnaire...Form XII.
mean score of 33.58 in the institutions with an enrollment of twenty thousand to forty thousand students.


## Persuasiveness

There was a significant difference at . 05 level of significance found between the leaders' mean score of 28.35 and the faculty members' mean score of 33.80 in the institutions with an enrollment of twenty thousand to forty thousand students.

## Initiation of Structure

There was no significant difference found between the leaders' mean score of 34.15 and the faculty members' mean score of 35.90 in the institutions with an enrollment of twenty to forty thousand students. Tolerance of Freedom

There was a significant difference at . 05 level of significance found between the leaders' mean score of 28.30 and the faculty members' mean score of 37.40 in the institutions with an enrollment of twenty thousand to forty thousand students.

## Role Assumption

There was no significant difference found between the leaders' mean score of 34.75 and the faculty members' mean score of 34.48 in the institutions with an enrollment of twenty thousand to forty thousand students.

## Consideration

There was a significant difference at . 05 level of significance found between the leaders' mean score of 28.45 and the faculty members' mean score of 34.03 in the institutions with an enrollment of twenty to forty thousand students.

Production Emphasis
There was no significant difference found between the leaders'
mean score of 35.20 and the faculty members' 34.51 in the institutions with an enrollment of twenty thousand to forty thousand students. Predictive Accuracy

There was no significant difference found between the leaders' mean score of 15.80 and their faculty members' mean score of 16.30 in the institutions with an enrollment of twenty thousand to forty thousand students.

## Integration

There was no significant difference found between the leaders' mean score of 14.30 and the faculty members' mean score of 16.10 in the institutions with an enrollment of twenty thousand to forty thousand students.

## Superior Orientation

There was no significant difference found between the leaders' mean score of 33.85 and the faculty members' mean score of 34.98 in the institutions with an enrollment of twenty thousand to forty thousand students.

Comparison of Leaders and Faculty Members at Different Sizes in Institutions To Leader Behavior Description Questioniaire....Form XII

A one-way analysis of variance was computed to test the signifi-. cance of differences in leaders and the faculty members' perceptions in different sizes of institutions to each element of the Leader Behavior Description Questionnaire....Form XII. Table VIII will summarize.the. findings.

There were significant differences at . 05 level of significance found in the dimensions of Demand Reconciliation, Tolerance of Freedom, Consideration, Production Emphasis, Integration, and Superior Orientation.

## TABLE VIII

ONE-WAY ANALYSIS OF VARIANCE TABLE - COMPOSITE OF ALL FOUR
INSTITUTIONS FOR LEADERS AND FACULTY MEMBERS AS ONE GROUP TO LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE....FORM XII

| VARIABLE NAME | SOURCES | SUM OF SQULARES | DEGREES FREE | $\begin{aligned} & \text { OF MEAN } \\ & \text { OM } \end{aligned}$ | $\begin{gathered} \text { F } \\ \text { RATIO } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| REPRESENTATION | Between Group Within Group Total | $\begin{array}{r} 42.475 \\ 2277.525 \\ 2320.000 \end{array}$ | $\begin{array}{r} 3 \\ 316 \\ 319 \end{array}$ | $\begin{array}{r} 14.158 \\ 7.207 \end{array}$ | 1.96 |
| RECONCILIATION | Between Group Within Group Total | $\begin{array}{r} 90.425 \\ 3508.325 \\ 3598.750 \end{array}$ | $\begin{array}{r} 3 \\ 316 \\ 319 \end{array}$ | $\begin{aligned} & 30.141 \\ & 11.102 \end{aligned}$ | 2.71 |
| TOL. UNCERT. | Between Group Within Group Total | $\begin{array}{r} 174.062 \\ 9142.825 \\ 9316.887 \end{array}$ | $\begin{array}{r} 3 \\ 316 \\ 319 \end{array}$ | $\begin{aligned} & 58.020 \\ & 28.932 \end{aligned}$ | 2.01 |
| PERSUASIVE. | Between Group within Group Total | $\begin{array}{r} 142.075 \\ 11853.478 \\ 11995.550 \end{array}$ | $\begin{array}{r} 3 \\ 316 \\ 319 \end{array}$ | $\begin{aligned} & 47.358 \\ & 37.510 \end{aligned}$ | 1.26 |
| INIT. STRUCT. | Between Group Within Group Total | $\begin{array}{r} 182.509 \\ 12613.587 \\ 12796.096 \end{array}$ | $\begin{array}{r} 3 \\ 316 \\ 319 \end{array}$ | $\begin{aligned} & 60.836 \\ & 39.916 \end{aligned}$ | 1.52 |
| TOL. FREEDOM | Between Group Within Group Total | $\begin{array}{r} 496.925 \\ 16313.275 \\ 16810.200 \end{array}$ | $\begin{array}{r} 3 \\ 316 \\ 319 \end{array}$ | $\begin{array}{r} 165.641 \\ 51.624 \end{array}$ | 3.21 * |
| ROLE ASSUMP. | Between Group Within Group Total | $\begin{array}{r} 271.075 \\ 110.0 .875 \\ 1131.1 .950 \end{array}$ | $\begin{array}{r} 3 \\ 316 \\ 319 \end{array}$ | $\begin{aligned} & 90.358 \\ & 34.907 \end{aligned}$ | 2.59 |
| CONSIDERATION | Between Group Within Group Total | $\begin{array}{r} 503.509 \\ 12464.362 \\ 12967.871 \end{array}$ | $\begin{array}{r} 3 \\ 316 \\ 319 \end{array}$ | $\begin{array}{r} 167.836 \\ 39.444 \end{array}$ | 4.26 * |
| PRODUCT. EMPHA. | Between Group Within Group Total | $\begin{array}{r} 284.325 \\ 7776.475 \\ 8060.800 \end{array}$ | $\begin{array}{r} 3 \\ 316 \\ 319 \end{array}$ | $\begin{aligned} & 94.775 \\ & 24.609 \end{aligned}$ | 3.85 * |
| PREDICT. ACCUR. | Between Group Within Group Total | $\begin{array}{r} 53.634 \\ 2614.487 \\ 2668.121 \end{array}$ | $\begin{array}{r} 3 \\ 316 \\ 319 \end{array}$ | $\begin{array}{r} 17.878 \\ 8.273 \end{array}$ | 2.16 |
| INTEGRATION | Between Group Within Group Total | $\begin{array}{r} 177.409 \\ 5228.587 \\ 5405.996 \end{array}$ | $\begin{array}{r} 3 \\ 316 \\ 319 \end{array}$ | $\begin{aligned} & 59.136 \\ & 16.546 \end{aligned}$ | 3.57 * |

TABLE VIII (continued)

| VARIABLE <br> NAME | SOURCES | SUM OF <br> SQUARES | DEGREES OF MEAN <br> FREEDOM | $F$ <br> RATIO |  |
| :--- | :--- | ---: | :---: | ---: | :--- |
| SUPERIOR ORIEN. |  | Between Group | 283.424 | 3 | 94.475 |
|  | Within Group | $2.96 *$ |  |  |  |
|  | Total | 10100.375 | 316 | 31.963 |  |
|  |  |  |  |  |  |

* Significant at . 05 level of significance.


## Duncan's Multiple Range Test

Because the null hypothesis was rejected for the significant difference found between any pair of means, and because the obtained F-ratio was well at and beyond the .05 level of significance, a Duncan's Multiple Range Test was performed to determine the exact locations of significance. The results of Duncan's Multiple Range Test appear in Table IX, which were as follows:

## Representation

There was a significant difference at . 05 level of significance reported between the mean score of the leaders and their faculty members of 18.78 in the institutions with an enrollment of five thousand to ten thousand students and the mean score of the leaders and their faculty members of 19.78 in institutions with an enrollment of twenty thousand to forty thousand students.

Demand Reconciliation
There was a significant difference at .05 level of significance found between the mean score of the leaders and their faculty members of 15.75 in the institutions with an enrollment of ten thousand to twenty thousand students and the mean score of the leaders and their faculty members of 17.03 in the institutions with an enrollment of five thousand students or less.

Tolerance of Uncertainty
There was a significant difference at . 05 level of significance found between the mean score of the leaders and their faculty members of 31.08 in the institutions with an enrollment of ten thousand to twenty thousand students and the mean score of the leaders and their faculty members of 33.10 in the institutions with an enrollment of five thousand

TABLE IX
DUNCAN'S MULTIPLE RANGE TEST TABLE-SIGNIFICANT DIFFERENCES BETWEEN MEAN SCORE OF LEADERS AND FACULTY MEMBERS IN FOUR DIFFERENT INSTITUTION SIZES FOR LBDQ FORM XII

| VARIABLE NAME | MEAN | DIFFERENCE BETWEEN MEANS | INSTITUTIONS SIZE IN THOUSAND STUDENT |
| :---: | :---: | :---: | :---: |
| REPRESENTATION | 19.78 | 1.00 * | 20-40 |
|  | 18.78 |  | 5-Less |
| RECONCILIATION | 17.03 | 1.28 * | 5-Less |
|  | 15.75 |  | 10-20 |
| TOL. UNCERTAIN. | 31.10 | 1.30 * | 5-Less |
|  | 31.80 |  | 10-20 |
| PERSUASIVENESS | 34.27 |  | 5-Less |
|  | 33.66 |  | 10-20 |
|  | 33.27 |  | 5-10 |
|  | 32.43 |  | 20-40 |
| INITI. STRUCTURE | 36.82 |  | 5-Less |
|  | 36.77 |  | 5-10 |
|  | 35.46 |  | 20-40 |
|  | 35.15 |  | 10-20 |
| TOL. FREEDOM | 38.26 | 3.14 * | 5-Less |
|  | 35.12 |  | 20-40 |
| ROLE ASSUMP. | 34.61 | 2.26 * | 5-Less |
|  | 32.35 |  | 10-20 |
| CONSIDERATIG: | 35.58 | 2.95 * | 10-20 |
|  | 32.63 |  | 20-40 |
| PRODUC. EMPHA. | 34.68 | 2.47 * | 20-40 |
|  | 32.21 |  | 10-20 |
| PREDICT. ACCUR. | 17.30 | 1.13 * | 5-Less |
|  | 16.17 |  | 20-40 |
| INTEGRATION | 17.58 | 1.93 * | 5-Less |
|  | 15.65 |  | 20-40 |
| SUPERIOR ORIEN. | 34.88 | 2.28 * | 5-Less |
|  | 32.60 |  | 10-20 |

* Significant at. 05 level of significance.

LBDQ..FORM XII, is Leader Behavior Description Questionnaire...Form XII.
students or less,
Persuasiveness
There was no significant difference found between the mean score of leaders and their faculty members of any institutions' size. Initiation of Structure

There was no significant difference found between the mean score of leaders and their faculty members of any institutions' size. Tolerance of Freedom

There was a significant difference found at the . 05 level of significance between the mean score of the leaders and their faculty members of 32.35 in the institutions with an enrollment of twenty to forty thousand students and the mean score of the leaders and faculty members of 34.61 in the institutions with an enrollment of five thousand students and less.

Consideration
There was a significant difference at . 05 level of significance found between the mean score of leaders and their faculty members of 32.63 in the institutions with an enrollment of twenty thousand to forty thousand students and the mean score of the leaders and their faculty members of 35.58 in the institutions with an enrollment of ten thousand students to twenty thousand students.

## Production Emphasis

There was a significant difference at . 05 level of significance found between the mean score of the leaders and their faculty members of 32.21 in the institutions with an enrollment of ten thousand to twenty thousand students and the mean score of the leaders and their faculty members of 34.68 in the institutions with an enrollment of twenty thousand to forty thousand students.

## Predictive Accuracy

There was a significant difference at . 05 level of significance found between the mean score of the leaders and their faculty members of 16.17 in the institutions with an enrollment of twenty thousand to forty thousand students and the mean score of the leaders and their faculty members of 17.30 in the institutions with an enrollment of five thousand students and less.

## Integration

There was a significant difference-at . 05 level of significance found between the mean score of the leaders and their faculty members of 15.65 in the institutions with an enrollment of twenty thousand to forty thousand students and the mean score of the leaders and their faculty members of 17.58 in the institutions with an enrollment of five thousand students and less.

Superior Orientation
There was a significant difference at . 05 level of significance found between the mean score of the leaders and their faculty members of 32.60 in the institutions with an enrollment of ten thousand to twenty thousand students and the mean score of the leaders and their faculty members of 34.88 in the institutions with an enrollment of five thousand students and less.

From what had been mentioned previously, it could be indicated that there were many significant differences found between different schools and different groups of leaders and faculty members which indicated the rejection of the null hypothesis of this investigation. Therefore, it could be indicated also that the different sizes of institutions and the sample sizes might be a factor in determining the degree of agreement or disagreement between the leaders and the faculty members
about the leader behavior dimensions, but this question was not considered as part of this investigation. Therefore, the investigator will not discuss it.

## Leader Authority

A scale to examine the types and extent of authority given to departmental leaders developed by fiedler and Hunt (1964) was used for this investigation. The scale contained eighteen statements to which a positive or negative response could be made. All administrators and faculty members who participated in this study were asked to respond to this part of the investigation. A single score was obtained for each individual by summing the number of positive responses he/she had made. A copy of the Leader Authority Scale appears in Appendix A.

## Leaders' Responses

Results of leader responses to the Leader Authority Scale will be shown in Table X. A mean score of 11.03 points was obtained from the distribution of scores from eighty leaders. This mean score meant that the sample of the leaders had an average of slighty over half of the items listed in the scale. The standard deviation for this mean was 3.50. There was a 15 point range encompassing a high score of 17 points and a low score of 2 points.

## Faculty Members' Responses

The results of the faculty members' responses to the Leader Authority Scale appear in Table X. Faculty members as a group had a slightly higher estimate of their administrators' authority than did the administrators themselves. ${ }^{\text {The mean score of the faculty members' responses }}$
as a group was 12.71. The standard deviation of this mean was 5.67 which was greater than the responses of the leaders. However, the range of the faculty members responses was 21 points, which was six points greater than the range of the leader's responses.

## Extent of Agreement Between Faculty and Leaders

The two-tailed test of the t-ratio between the leader's score and the mean score of faculty members' responses revealed significant differences at . 05 level of significance in eighty institutions. Therefore, there was no clear direction of the difference. The faculty members estimated their leaders' authority varied slightly from the estimation of the leaders themselves. If that indicated anything, it could indicate that administrators believed that they should have more power, while their faculty members believed that the administrators had power than it should. Table XI shows the results.

Differences in Leaders and Faculty Members' Responses as Four Different Groups

A one-way analysis of variance test was performed to determine differences in the leaders and their faculty members in the institutions of the same size and with those in different institutional size. The analysis produced an F-ratio of 3.53 which was significant at the .05 level of significance. Table XII summarizes the result. This difference led to rejection of the null hypothesis of this part of the study. Differences in Leaders and Faculty Members' Responses as Two Groups in Four Institutions of Different Sizes

A one-way analysis of variance test was performed to determine differences in leaders and their faculty members' responses as two group from various sizes of institutions. The analysis produced an F-ratio of 2.93, which was significant at . 05 level of significance. Table XIII

TABLE X
MEANS, STANDARD DEVIATIONS, MINIMUM VALUES, MAXIMUM VALUES, RANGES OF LEADERS AND FACULTY MEMBERS GROUPS RESPONSES TO LEADER AUTHORITY SCALE

| GROUP <br> NAME | N | MEAN | STANDARD <br> DEVIATION | MINIMUM <br> VALUE | MAXIMUM <br> VALUE | RANGE |
| :--- | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| FACULTY MEMBERS | 240 | 12.71 | 5.67 | 3 | 24 | 21 |
| LEADERS | 80 | 11.03 | 3.50 | 2 | 17 | 15 |

TABLE XI
COMPARISON OF LEADERS AND FACULTY MEMBERS' RESPONSES AS TWO GROUPS TO LEADER AUTHORITY SCALE

| GROUP | N | MEAN | RANGE | T-VALUE |
| :--- | :---: | :---: | :---: | :--- |
| FACULTY MEMBERS | 240 | 12.71 | 21 | $3.123 *$ |
| LEADERS | 80 | 11.03 | 15 | $2.486 *$ |

* Significant at . 05 level of significance.

TABLE XII
ONE-WAY ANALYSIS OF VARIANCE TABLE OF LEADERS AND FACULTY MEMBERS PERCEPTIONS ON LEADER AUTHORITY SCALE

| VARIABLE <br> NAME | SOURCES | SUM OF <br> SQUARE | DEGREES OF <br> FREEDOM | MEAN <br> SQUARE | $F$ <br> RATIO |
| :--- | ---: | ---: | :---: | ---: | ---: |
| AUTHORITY | Between Group | 386.437 | 3 | 95.479 | $3.53 *$ |
|  | Within Group | 8539.950 | 316 | 27.025 |  |
|  | Total | 8826.387 | 319 |  |  |

* Significant at . 05 level of significance.

TABLE XIII
ONE-WAY ANALYSIS OF VARIANCE TABLE OF LEADERS AND FACULTYMEMBERS AS TWO GROUPS : PERCEPTIONS ON LEADER AUTHORITY SCALE

| VARIABLE <br> NAME | SOURCES | SUM OF <br> SQUARE | DEGREES OF <br> FREEDOM | MEAN <br> SQUARE | F <br> RATIO |
| :--- | :--- | ---: | :---: | :---: | :---: |
| AUTHORITY | Between Group | 543.854 | 7 | 77.693 | $2.93^{*}$ |
|  | Within Group | 8282.533 | 316 | 26.546 |  |
|  |  |  |  |  |  |

* Significant at . 05 level of significance.
summarizes the results.


## END NOTES

${ }^{146}$ Ralph M. Stogdill, Manual for Leader Behavior Description Questionnaire....Form XII, Bureau of Business Research, The Ohio State University, Columbus, Ohio (1963).

## CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMANDATIONS

## SUMMARY

This study was undertaken to investigate leadership behavior and authority in physical education departments in the United States of America. The specific purposes were to investigate:

1. The leaders' responses to each subscale of the Leader Behavior Description Questionnaire....Form XII?
2. The faculty members' responses to each subscale of the Leader Behavior Description Questionnaire....Form XII?
3. How leaders' responses compare with those responses given by the faculty members to each subscale of the Leader Behavior Description Questionnaire....Form XII?
4. How leaders and faculty members' responses in different sizes of institutions compare with each other to each subscale of the Leader Behavior Description Questionnaire....Form XII?
5. The leaders' responses to the Leader Authority Scale?
6. The faculty members' responses to the Leader Authority Scale?
7. How leaders' responses compare with those given by the faculty members for the Leader Authority Scale?
8. How leaders and faculty members' responses in institutions of the same size compare on the Leader Authority Scale with those given by the leaders and faculty members in institutions of different sizes?

## Literature Review

Discussion regarding the development of administrative thought was illustrated by selected literature. Administrative theories based on research were and are being presented today in order to combine the first two schools of thought for increased production and employee contentment.

Educational administration has been faced with special administra-tive problems, and it became apparent that theories borrowed and adopted from other disciplines did not fully account for the differences of administrative practice that were illustrated in the discipline. The emp phasis in education administration has passed the stage of borrowing from business administrative theory and has recently focused on experimental methodology and investigation of administrators' behavior, administrative leadership, and the relationship with society.

A second section of literature examination included a review of some of the leadership styles to identify some of the leadership aspects under various styles of administration. Another section of the literature review was devoted to a description of leader study through the use of the Leader Behavior Description Questionnaire...its development by the Ohio State Personal Research Board; discussion of its strengths and weaknesses; and the results of selected leadership behavior studies which tend to demonstrate that specific leadership skills can be taught, understood, and shared for the betterment of groups' goal achievement.

## Procedures

Two questionnaire scales representing thirteen variables were used in this investigation. The Leader Behavior Description Questionnaire... Form XII, and the Leader Authority Scale were used in the study of those thirteen variables. The Leader Behavior Description Questionnaire....

Form XII included twelve dimensions or subscales which were as follows: Representation, Demand Reconciliation, Tolerance of Uncertainty, Persuasiveness, Initiation of Structure, Tolerance of Freedom, Role Assumption, Consideration, Production Emphasis, Predictive Accuracy, Integration, and Superior Orientation. The Leader Authority Scale represented the thirteenth variable which was leader authority.

Eighty physical education department leaders and 240 of their full time department faculty members served as the subjects for this study. These departments were the eligible and willing participants as a result of a written request sent to randomly selected colleges and universities throughout the United States of America. Assistance was solicited from administrators by requesting them to furnish the department faculty members names without regard to sex, or age. A random selection was performed to select three faculty members from each list of the department names.

The distribution and collection of the questionnaire forms was by mail. The questionnaires were sent to the department administrators and their faculty members separately. The completed forms were returned directly to the investigator by each subject. No attempt was made to identify individual respondents other than by institutional affiliation. The entire distribution and collection of data took approximately three months.

Analysis of the data included the following statistical application: frequency analysis, two-tailed t-ratio test for difference between means, one-way analysis of variance for difference among means, and Duncan's multiple range test for specific location of the significance. A. 11 computations were done on the IBM/3081D Computer in the Oklahoma State University Computer Center, and the program which was used to
perform that statistical function was SAS.

Results

## Leader Behavior

The following results were obtained from responses to the Leader Behavior Description Questionnaire....Form XII by administrators and their faculty members representing eighty physical education departments of colleges and universities around the United States of America.

1. Leaders obtained the highest mean score of 36.88 on the Initiation of Structure dimension, but the highest mean score of the faculty members responses was 37.14 on the Tolerance of Freedom dimension.
2. Leaders rated their own behavior high on eight behavior dime-. nsions. Each of the eight mean scores was well above the mean score of the faculty members.
3. Leaders had higher mean scores on the Representation, Demand Reconciliation, Initiation of Structure, Role Assumption, Production Emphasis, Predictive Accuracy, Integration, and Superior Orientation dimensions of leader behavior. They apparently preferred a different leadership approach depending upon the situation.
4. Faculty members had higher mean scores on the Tolerance of Freedom, Consideration, Persuasiveness, and Tolerance of Uncertainty dimensions. As a group, they apparently considered that their leaders' be-havior emphasized these four dimensions.
5. High score from faculty members' responses were generally slight$1 y$ higher than the high scores among the administrators responses on all four leader behavior dimensions, and their lowest scores were slightly lower than the lowest scores of the administrators' responses. In fact, some faculty members gave extremely low ratings to their leaders
on the twelve dimensions, while others rated them very high. This might indicate that the personal relationship between the administrators and some faculty members affected the responses. Nevertheless, it would seem unreasonable to expect all faculty members to perceive the leader's behavior in the same way, especially when the investigator did not ask the administrator to select the faculty members to be part of the study. Moreover, rating the leaders low by their faculty members on some behavior dimension or rating themselves higher on some other dimensions would be cause for the leaders to reevaluate and adjust some aspects of their leadership behavior.
6. There were statistically significant differences between response scores of the leaders and the mean scores of the faculty members on three of the behavior dimensions. The differences, however, represented 25 percent of all possible sources for disagreement. The differences occurred in Role Assumption, Predictive Accuracy, and Superior Orientation where the leaders rated themselves considerably higher on these behavior dimensions. Numbers of faculty members as subjects might be a factor which affected the results of this study. However, since the goal of this study is not factoral analysis, the investigator will not further discuss this matter.
7. Seven leader's behavior dimensions were significantly different at the .05 level of significance between the mean scores of leaders and their faculty members in institutions with an enrollment of five thousand students and less. The dimensions were: Initiation of structure, Role Assumption, Consideration, Production Emphasis, Predictive Accuracy, Integration, and Superior Orientation.
8. There was only one significant difference at . 05 level of significance. This was between the leaders and their faculty members
mean score in institutions with an enrollment of five thousand to ten thousand students, and that occurred in the superior Orientation behavior dimension. It could indicate that in this size of institution; there was more agreement than disagreement among the behavior dimensions.
9. Three leader behavior dimensions were significantly different* at . 05 level of significance between the mean scores of leaders and their faculty members in institutions with an enrollment of ten to twenty thousand students. Those differences occurred in Representation, Role Assumption, and Superior Orientation. Leaders in this size of institutions tended to rate themselves higher in these institutions to control the environment of their department.
10. Faculty members in institutions with an enrollment of twenty to forty thousand students rated their leaders significantly higher in five leader behavior dimensions. These were Demand Reconciliation, Persuasiveness, Tolerance of Uncertainty, Tolerance of Freedom, and Consideration. This might represent some sort of positive type of relationship between leaders and their faculty members in this size of institution.
11. Six leader's behavior dimensions were significantly different between leaders and faculty members in different sizes of institutions. The F-ratios were as follows: 2.71 for Demand Reconciliation, 3.21 for Tolerance of Freedom, 4.26 for Consideration, 3.85 for Production Emphasis, 3.57 for Integration, and 2.96 for Superior Orientation. All of these F-ratios were significant at the . 05 level of significance; therefore, were judged to indicate that true differences did exist.
12.: A significant difference at . 05 level of significance was reported between the mean score of leaders and faculty members in institutions with an enrollment of twenty to forty thousand students, and
institutions with an enrollment of five thousand students or less on the Representation leaders' behavior dimension.
12. A mean score of leaders and faculty members in institutions with an enrollment of ten thousand to twenty thousand students was significantly different than the mean score of leaders and their faculty members in institutions with an enrollment of five thousand students or less in Demand Reconciliation leader's behavior dimension.
13. A mean score on the Tolerance of Uncertainty subscale was significantly different between the leaders and faculty members in institutions with an enrollment of ten thousand to twenty thousand students and institutions with an enrollment of five thousand students or less.
14. No significant difference was found between any size of institutions on Initiation of Structure dimension.
15. A significant difference was reported in the Tolerance of Freedom dimension between the mean score of leaders and their faculty members in institutions with an enrollment of twenty to forty thousand students and institutions with an enrollment of five thousand students or less.
16. There was a significant difference between the mean score of leaders and their faculty members in institutions with an enrollment of twenty thousand to forty thousand students and the mean score of leaders and their faculty members in institutions with an enrollment of ten thousand students on Consideration dimension.
17. A mean score of leaders and their faculty members in institutions with an enrollment of twenty thousand to forty thousand students was significantly different than the mean score of leaders and their faculty members in institutions with an enrollment of ten thousand to twenty thousand students on the Production Emphasis dimension.
18. A significant difference existed between the mean score of
leaders and their faculty members responses in institutions with an enrollment of twenty thousand to forty thousand students, and the mean score of leaders and their faculty members responses in institutions with an enrollment of five thousand students or less.
19. The integration dimension was reported significantly different between the mean score of the leaders and their faculty members responses in institutions with an enrollment of twenty thousand to forty thousand students, and the mean score of leaders and their faculty members responses in institutions with an enrollment of five thousand students or less.
20. A significant difference was found between the mean score of leaders and their faculty members in institutions with an enrollment of ten thousand to twenty thousand students, and the leaders and their faculty members in institutions with an enrollment of five thousand students or less on Superior Orientation dimension.

The following results were obtained from responses to the Leader Authority Scale:

1. Eighty leaders' responses to the Leader Authority Scale produced a mean score of 11.03 points. Although the mean score indicated that administrators believed that they had an average of half of the authority scale's items, the range and the standard deviation of 3.50 gave evidence of considerable differences in the leaders' responses.
2. The faculty members' responses produced a mean score of 12.71 , indicating that faculty members had slightly higher estimate of their leaders' authority than was given by the leaders. However, faculty members' responses were also widely varied, encompassing a high score of range and standard deviation.
3. Administrators and faculty members' responses were signifi-
cantly different on the authority estimation.
4. An F-ratio of 3.53 was produced from the four different sizes of institutions which was significant at . 05 level of significance.
5. An F-ratio of 2.93 was produced from the leaders and their faculty members as one group which was significantly different at the . 05 level of significance.
6. Faculty members of institutions with five thousand students or less estimated their leaders' authority higher than any other size of institutions with 14.51 points, while faculty members from institutions with an enrollment of ten thousand to twenty thousand students estimated their leaders' authority lower than the others. Therefore, faculty members did not estimate their leaders' authority equally among different sizes of institutions.
7. Leaders of institutions of five thousand to ten thousand stu-• dents estimated their authority higher than the other three groups of sizes with a mean score of 12.25 points, while leaders of institutions of ten thousand to twenty thousand students estimated their authority as low as 9.60 points, which was the lowest score. All in all, institutional size can be a factor affecting the estimation rate of leaders' authority.

Conclusions

The investigator hoped that this study of leadership behavior and authority would suggest some new ideas, challenge existing opinions, and clear some aspects of the leadership relationship between the leaders and their faculty members within the physical education departments in colleges and universities in the United States of America. From the evidence that has been presented, the following conclusions are appropriate:

1. The leaders viewed themselves as a major representative of the
group in and outside of the department. This conclusion was generated from the result regarding the perception scores of leaders on Representation dimension.
2. The leaders viewed themselves as those who can handle problems efficiently regarding the complexity which might occur, and as those who can put things in order to the organization system. This conclusion was derived from the leaders' scores on items related to Demand Reconciliation dimension.
3. The leaders perceived themselves as those who want the performance of their department to be as good and rapid as possible, and the jobs follow definite standards. This conclusion was derived from the leaders scores on items related to Initiation of Structure dimension.
4. The leaders perceived themselves as those who are recognized as leaders in their department, and those who do not qive their authority to someone else. The leaders disagreed that they were known as a leader of the group in name only. This conclusion was generated from the leaders scores on items related to Role Assumption dimension.
5. The leaders perceived themselves as those who keep the work moving rapidly, and the production of the department is as large as possible. This conclusion was derived from the leaders' scores on items related to Production Emphasis dimension.
6. The leaders viewed themselves as those who make accurate decisions, and who can predict what might happen next. Also, they seemed to view themselves as those who can plan for anticipated problems. This conclusion was reached from the leaders' scores on items related to Predictive Accuracy dimension.
7. The leaders viewed themselves as those who settle conflicts when they occur between group members, and keep the group working as
a team. This conclusion was generated from the leaders' scores on items related to Integration dimension.
8. The leaders viewed themselves as those who respect the authority of the people above them, and devlop a good relationship through that respect with the superior for his/her benefits and for the benefit of the group.
9. The faculty members agreed that their leaders are those who encourage initiative in the group members, and gave the group members the freedom to perform their work the way they think best. This conclusion was derived from the faculty members' scores on items related to Tolerance of Freedom dimension.
10. The faculty members viewed their leaders as those who are friendly and approachable, and respect the ideas of the group members. This conclusion was reached from the scores of the faculty members on items related to Consideration dimension.
11. The faculty members perceived their leaders as those who are good talkers, and those who can convince others through or during arguments. This conclusion was derived from the faculty members' scores on items related to Persuasiveness dimension.
12. The faculty members perceived their leaders as those who remain calm during unpleasent events, and as those who are able to take the appropriate action at the appropriate time. This conclusion was generated from the faculty members' scores on items related to Tolerance of Uncertainty dimension.
13. Faculty members' estimation of the Leaders' authority differ significantly from the estimate given by the leaders themselves. This disagreement on this dimension may be caused by lack of communication, misunderstanding, or different perspectives.
14. The perceptions and estimates of leaders and their faculty members differ significantly among various sizes of institutions which make different levels of pressure on leaders and also on faculty members, especially, in institutions with a large enrollment of students.

The investigator agreed that a good work atmosphere and a friendly democratic open door relationship between the administrators and their faculty members were needed in the physical education departments in colleges and universities. There should be more attempts to develop or encourage a good relationship between them in regarding leader behavior described by the Leader Behavior Description Questionnaire....Form.XII.

On the other hand, faculty members should also recognize the responsibility of the leadership, and that responsibility should be respected and considered as responsibility of both parties in the department. Every group member should consider himself/herself as a leader in his/ her position.

## Recommendations for Further Research

During the conduct of this study, attention was called to several additional problems related to this topic. These are presented as suggestions for further study:

1. Further investigation of leader authority with a different, modern scale, which should be developed specially for educational leaders.
2. Study the leader behavior among deans, directors, and chairpersons of the department in order to determine the differences between the self-perception of the three positions.*
3. Develop a new leader behavior scale which would provide a better method for determining faculty members' perceptions of their leaders' behavior.
4. Conduct a similar study, but not a descriptive study, to investigate the factors which might affect differences between perceptions such as age, sex, experience, degree, workload, school size, and years in position.
5. Conduct a similar study in diferent countries, to determine the differences between the behavior perception in other countries and in the United States.

Fiedler has mentioned that overall performance of an organization is credited to the leadership and administrative abilities of its executives. He also said that there is evidence which demonstrates that the department chairperson plays an important role in determining group performance, group moral, and job satisfaction. ${ }^{147}$

[^1]${ }^{147}$ Fred E. Fiedler, A Theory of Leadership Effectiveness, p. 3.

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APPENDIXES

APPENDIX A

CORRESPONDENCE AND QUESTIONNAIRES

## August 23, 10.34

```
To Whom It May Concern:
    I am a graduate student at Oklahoma State C'niversity working toward
my doctoral degree in administration of physical education. Recognizing
the significance of leadership in administration. I am investigating the
leader behavior and authority as it is perceived by administrator and
faculty members.
    I will use the leader Behavior Discreption Questionnaire - Form IIX
and the Leader futhority Scale. Elghty institutions were randomly selected
to be a part of the study, twenty schools in each geographical area. and
your institution was one of those selected. The chalrperson of each
physical education department and three of his/her faculty members, whom
will be randomly selected from the list of each school. Will be asked to
participate in the study. Because the distribution of the questionnaire
wlll be done randomly among vour faculty members. I would like to ask you
to print the names of all your faculty members on the attached sheet.
tfter completing the information, please return it in the attached stamped
envelope as soon as possible. Each of you will then receive a copy of
the questionnalre and a return stamped envelope.
    Your participation will be.greatly appreciated, and hopefully. will
add to the knowledge in the area of administration of physical education.
                        Sincerely,
```

Farik t. Kamouna Oklahoma State University

Dr. Betty tbercrombie tssistant Director
Chair Physical Education School of HPELS

FAK. © Jw

I have received your list of names and thank you for your willinaness to particiratee in this investigation about administrative leadershin in phusical education de:’artment.

Copies of the research instruments are enclosed. $i$ self-adiressed stamped evvelone is attached to each copy. Complete directions for responding to the instruments are included on the forms. It would be very helpful if you would complete and return the forms as quickly as nossible, preferably within one or two weeks.
ily appreciation to you and your staff merbers for coornoration in this investigation.

Sentember lst, 1984.

```
                                Sincerely,
```

Faril: Kamouna

Stogdill, Ralph M. Farik A. Kamouna
Bureau of Business Research 33-5 N. University P1.
Ohio State University
Columbus, Ohio 43201

Dear sir:
I am a doctoral student at Oklahoma State University working toward my Ed. D, degree in Higher Education administration. I am interesting in research about the relationship between the administrator and his/her staff or faculty members in department of physical education. I heared that you created a Manual for the Leader Behavior Description Questionnaire....Form XII, which will fit with my research. I will looking on the administrators behavior and his/her authority scale. I please you to send me a copy of your mentioned questionnaire along with your written permission to use it. I will be glad to send to you the result of my study as soon as I will finish it.

I am sure that you will help me in this matter, and your cooperation will be much appreciated. Thank you deeply.

Sincerely,

Feb. 18th, 1983
Farik A. Kamouna
cc. Dr. Betty Abercrombie

Chairman and Major Adviser of the Study, HPELS Dept. OSU.

# MANUAL <br> for the <br> LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE.... Form XII <br> An Experimental Revision 

Ralph M. Stogdill

Bureau of Business Research College of Commerce and Administration The Ohio State University

Columbus, Ohio
1963

The Leader Behavior Description Questionnaire, often referred to as LBDQ, was developed for use in obtaining descriptions of a supervisor by the group members whom he/she supervises. It can be used to determine the description of the behavior of the leader, or leaders, in any type of group or organization, provided the followers have had an opportunity to observe the leader in action as a leader of their group.

Origin of the Scales
The LBDQ grew out of work initiated by Hemphill. Further development of the scales by the staff of the Ohio State Leadership Studies has been described by Hemphill and Coons. Shartle has outlined the theoretical considerations underlying the descriptive method. He observed that "when the Ohio State Leadership Studies were initiated in 1945, no satisfactory theory or definition of leadership was available." It was subsequently found in empirical research that a large number of hypothesized dimensions of leader behavior could be reduced to two strongly defined factors. These were identified by Halpin and Winer and Fleishman as Consideration and Initiation of Structure.

The two factorially defined subscales, Consideration and Initiation of Structure, have been widely used in empirical research, particularly in military organizations, and education. Halpin reports that "in several studies where the agreement among respondents in describing their respective leaders has been checked by a 'between group vs. within group' analysis of variance, the $F$ ratios all have been found significant at the .01 level. Followers tend to agree in the same leader, and the descriptions of different leaders differ significantly."

## The Eevelopment of Form XII

It has not seemed reasonable to believe that two; factors are sufficient to account for all the observable variance in-meader behavior. However, as Shartle (16) observed, no theory was available to suggest additional factors. A new theory of role differentiation and group achievement by Stogdill (17), and the survey of a large: body of research data that supported that theory, suggested that, a member of variables operate in the differentiation of roles in social groups. Possible factors suggested by the theory are the following: tolerance of uncertainty, persuasiveness, tolerance of member freedom of action, predictive accuracy, integration of the group, and reconciliation of conflicting demands. Possible new factors suggested by the results of empirical research are the following: representation of group interests, role assumption, production emphasis, and orientation toward superiors.

Items were developed for the hypothesized subscales. Questionnaires incorporating the new items were administered to successive groups. After item analysis, the questionnaires were revised, administered again, reanalyzed, and revised.

Marder reported the first use of the new scales in the study of an army airborne division and state highway patrol organization.

## Definition of the Subscales

Each subscale is composed of either five or ten items. A subscale is necesserily defined by its component items, and represents a rather complex patterns of behaviors. Brief definitions of the subscales are listed below:

1. Representation - speaks and acts as the representative of the group.
( 5 items)
2. Demand Reconciliation- reconciles conflicting demands and reduces disorder to system. (5 items)
3. Tolerance of Uncertanty - is able to tolerate uncertainty and postponement without anxiety or upset. (10 items)
4. Persuasiveness- uses persuasion and argument effectively; exhibits strong convictions. (10 items)
5. Initiation of Structure- clearly defines own role, and lets followers know what is expected. (10 items)
6. Tolerance of Freedom- allows followers scope for initiative, decision, and action. (10 items)
7. Role Assumption- actively exercises the leadership role rather than
surrendering leadership to others. (10 items)
8. Cons deration- regards the comfort, well being, status, and contributions of followers. (10 items)
9. Production Emphasis- applies pressure for productive output. (10 items)
10. Predictive Accuracy- exhibits foresight and ability to predict outcomes accurately. (5 items)
11. Integration- maintains a closely knit organization; resolve intermember conflicts. (5 items)
12. Superior Orientation- maintains cordial relations with superiors;
has influence with them; is striving for higher status. (10 items)

## Scoring Key

The subject indicates his/her response by drawing a circle around one of the five letters ( $A, B, C, D, E$ ) following an item. As indicated on the Scoring Key, most items are scored: $\begin{array}{ccccc}A & B & C & D & E \\ 5 & 4 & 3 & 2 & 1\end{array}$ A circle around $A$ gives the item a score of 5; a circle around B gives it a score of 4; and a circle around E gives the item a score of 1.

The 20 starred items on the Scoring Key are scored in the reverse direction, as follows: | $A$ | $B$ | $C$ | $D$ | $E$ |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 |

In use at the Bureau of Business Research, the score is written after each item in the margin of the test booklet (questionnaire).

|  | SCORES | ISDQ PORM III |
| :---: | :---: | :---: |
| ait starred items | red 12345 |  |
| All other items | red 5431 |  |



## Record Sheet: Scoring the Subscales

The assignment of items to different subscales is indicated in the Record Sheet. For example, the Representation subscale consists of items $1,11,21,31$, and 41 . The sum of the scores for these five items constitutes the score for the subscale Representation. The score for Demand Reconciliation consists of the sum of the scores assigned to items $51,61,71,81$, and 91 . The score for Tolerance of Uncertainty consists of the sum of the scores on items 2, 12, 22, 32, 42, $52,62,72,82$, and 92.

By transferring the item scores from the test booklet to the Scoring Sheet, it is Possible to add the item score quickly to obtain an accurate score for each subscale.

LbDQ Form XII - hicord sheet


## Subscale Means and Standard Deviations

There are norms for the LBDQ. The questionnaire was designed for use as a research device. It is not recommended for use in selection, assignment, or assessment purposes.

The means and standard deviations for several highly selected samples are shown in Table 1. The samples consist of commissioned and noncommissioned officers in an army combat division, the administrative officiers in a state highway patrol headquarter office, the executives in an aircraft engineering staff, ministers of various denominations of an Ohio Community, leaders in community development activities throughout the state of Ohio, presidents of "successful" corporations, presidents of laber unions, presidents of colleges and universities, and United States Senators.

Reliability of the Subscales

The reliability of the subscales was determined by a modified Kuder-Richardson formula. The modification consists in the fact that each item was correlated with the remai ir of the items in its subscale rather than with the subscale scor including the item. This procedure yields a conservative estimate of subscale reliability. The reliability coefficients are shown in Table 2.
:
Table 2. Reiiability Coe: :icients (i:odifaed Rucer-Richerdson)

| Subscale | Army <br> Division | Highway Patrol | Air- <br> craft <br> Execu- <br> tives | Ainisters | Community <br> Leaders | Corporation Presidents | Labor Presidents | College <br> Presi- <br> dents | Exisiors |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Representation | . 82 | . 85 | . 74 | . 55 | . 59 | . 54 | . 70 | . 66 | . ${ }^{\text {a }}$ |
| 2. De :and Recsactliation |  |  | . 73 | . 77 | . 58 | . 59 | . 81 |  | . ${ }^{\text {c }}$ |
| 3. Tolerance Uricertainty | . 58 | . 66 | . 82 | . 84 | . 85 | . 79 | . 82 | . 80 | .83 |
| 4. Persuasiveness | . 84 | . 85 | . . 84 | .77 | . 79 | . 69 | . 80 | . 76 | . 82 |
| Fs. Initiating Structure | . 79 | . 75 | .78 | .70 | .72 | . 77 | . 78 | . 80 | . 72 |
| ć. Toierance Freedom | . 81 | . 79 | . 86 | . 75 | . 86 | . 84 | . 58 | .73 | .ć4 |
| 7. Role Assumption | . 85 | . 84 | . 84 | . 75 | . 83 | . 57 | . 86 | . 75 | . 65 |
| 8. Consideration | . 76 | . 87 | . 84 | . 85 | . 77 | . 78 | . 83 | .76 | . 85 |
| 9. Production Emphasis | . 70 | . 79 | .79 | . 59 | .79 | . 71 | . 65 | .74 | . 38 |
| 1 $\therefore$ Predictive Accuracy | . 76 | . 82 | . 91 | . 83 | . 62 | . 64 | . 87 |  |  |
| 11. Irtegration | . 73 | . 79 |  |  |  |  |  |  |  |
| 12. Superior Orientation | . 64 | . 75 | . 81 |  |  | .óó |  | . 5 |  |

## Administrating the LBDQ

The LBDQ is ususally employed by followers to describe the behavior of their leader or supervisor. However, the questionnaire can be used by peers or superiors to describe a given leader whom they know well enough to describe accurately. With proper changes in instructions, the questionnaire can also be used by a leader to describe his/her own behavior.

The questionnaire can be administered individually or in groups. It is usually not necessary for the person making the description to write his/her name on the test booklet. However, the name of the leader being described should be written on the test booklet. It is necessary to identify the person being described whenever it is desired to add togather (and obtain an average of ) the description of several describers.

How may describers are required to provide a satisfactory index score of the leader's behavior? Halpin (7) suggest that "a minimum of four respondents per leader is desirable, and additional respondents beyond ten do not increase significantly the stability of the index scores. Six or seven respondents per leader would be a good standard."

In explaining the purpose and nature of a research pro. it to a group of respondents, it has not found necessary to caution nem about honesty or frankness. It has been found sufficient to say, "All that is required is for you to describe your supervisor's behavior as accuratly as possible." Whenever possible to do so, it is desirable to assure the respondents that their descriptions will not be seen by any of the persons whom they are asked to describe.

# LEMDER BEHAVIOR CESCRIPTION QUESTIONNAIRE—Form XII 

> Originated by staff members of The Ohio State Leadership Studies and revised by the
> Bureau of Business Research

Purpose of the Questionnaire
On the following pages is a list of items that may be used to describe the behavior of your supervisor. Each item deseribes a specific kınd of behavior, but does not ask you to judge whether the behavior is desirable or undesirable. Although some items may appear similar. they express differences that are important in the desenption of leadership. Each item should be considered as a separate descnption. This is not a test of ability or consistency in making answers. Its only purpose is to make it possible for you to describe, as accurately as you can, the behavior of your supervisor.
-
Note: The term, " group." as employed in the following items, refers to a department, division. or other unt of organzation that is supervised by the person being described.

The term "members." refers to all the people in the unit of organization that is supervised by the person being described.

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The Ohlo State University Columbus, Onio

DIAECTIONS:
a. READ each tem carefully.
b. THINK about how frequently the leader engages in the behavior described by the item.
c. DECIDE whether he/she (A) always, (B) often, (C) occasionally, (D) seldom or (E) never acts as described by the item.
d. DRAW A CIRCLE around one of the five letters (A B C D E) following the item to show the answer you have selected.
$A=$ Always
$B=$ Often
$C=$ Occassemally
$D=$ Seldom
$E=$ Never
e. MARK your answers as shown in the examples below.


| 1. Acts | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2. Waits patuently for the results of a decision | A | B | C | D | E |
| 3. Makes pep talks to stimulate the group | A | B | C | D | E |
| 4. Lets group members know what is expected of them | A | B | C | D | E |
| S. Allows the members complete freedom in their work | A | B | C | D | E |
| 6. Is hesitant about taking initative in the group | A | B | C | D | E |
| 7. Is friendly and approachi :e | A | B | C | D | E |
| 8. Encourages overume wor : | A | B | C | D | E |
| 9. Makes accurate decisions | A | B | C | D | E |
| 10. Gets along well with the people above him/her | A | B | C | D | E |
| 11. Publicizes the actuvitues of the group | A | B | C | D | E |
| 12. Becomes anxious when he/she cannot find out what is comung next | A | B | C | D | E |

$$
\begin{aligned}
& A=\text { Always } \\
& B=\text { Often } \\
& C=\text { Occastonally } \\
& D=\text { Seldom } \\
& E=\text { Never }
\end{aligned}
$$

| 13. His/her arguments are convincing | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14. Encourages the use of unform procedures | A | B | C | D | E |
| 15. Permits the members to use their own judgment in solving problems | A | B | C | D | E |
| 16. Fails to take necessary action | A | B | C | D | E |
| 17. Does little things to make it pleasant to be a member of the group | A | B | C | D | E |
| 18. Stresses being ahead of competing groups | A | B | C | D | E |
| 19. Keeps the group working together as a team | A | B | C | D | E |
| 20. Keeps the group in good standing with higher authonty | A | B | C | D | E |
| 21. Speaks as the representative of the group | A | B | C | D | E |
| 22. Accepts defeat in stride | A | B | C | D | E |
| 23. Argues persuasively for his/her point of view | A | B | C | D | E |
| 24. Tnes out his/her ideas in the group | A | B | C | D | E |
| 25. Encourages initiative in the group members | A | B | C | D | E |
| 26. Lets other persons take away his/her leadership in the group | A | B | C | D | E |
| 27. Puts suggestions made by the group into operation | A | B | C | D | E |
| 28. Needles members for greater effort | A | B | C | D | E |
| 29. Seems able to predict what is commg next | A | B | C | D | E |
| 30. Is working 1 red for a promotion | A | B | C | D | E |
| 31. Speaks for the group when visitors are present | A | B | C | D | E |
| 32. Accepts delays without becoming upset . | A | B | C | D | E |
| 33. Is a very persuasive talker | A | B | C | D | E |
| 34. Makes his/her attitudes ciear to the group | A | B | C | D | E |
| 35. Lets the members do their work the way they think best | A | B | C | D | E |
| 36. Lets some members take advantage of him/her | A | B | C | D | E |

$$
\begin{aligned}
& A=\text { Always } \\
& B=\text { Often } \\
& C=\text { Occasionally } \\
& D=\text { Seidom } \\
& E=\text { Never }
\end{aligned}
$$

| 37 Treats all group members as his/her equais | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 38. Keeps the work moving at a rapid pace | A | B | C | D | E |
| 39 Settles conflicts when they occur in the group | A | B | C | D | E |
| 40. His/her superiors act favorably on most of his/her suggestions. | A | B | C | D | E |
| 41. Represents the group at outside meetings | A | B | C | D | E |
| 42. Becomes anxious when watung for new developments. | A | B | C | D | E |
| 43. Is very skullfui in an argument | A | B | C | D | E |
| 44. Decides what shall be done and how it shall be done | A | B | C | D | E |
| 45. Assigns a task, then lets the members handle it | A | B | C | D | E |
| 46. Is the leader of the group in name only | A | B | C | D | E |
| 47. Gives advance notuce of changes | A | B | C | D | E |
| 48. Pushes for increased production | A | B | C | D | E |
| 49. Things usually turn out as he/she predicts | A | B | C | D | E |
| 50. Enjoys the privileges of his/her position | A | B | C | D | E |
| s1. Handies complex problems efficiently | A | B | C | D | E |
| S2. Is able to tolerate postponement and uncertainty | A | B | C | D | E |
| 53. Is not a very convincing talker | A | B | C | D | E |
| 54. Assigns grour members to particular tasks | A | B | C | D | E |
| 55. Tums the meinbers loose on a job, and lets them go to it | A | B | C | D | E |
| 56. Backs down when he/she ought to stand firm | A | B | C | D | E |
| 57. Keeps to himself/herself. | A | B | C | D | E |
| 58. Asks the members to work harder . | A | B | C | D | E |
| 59. Is accurate in predictung the trend of events | A | B | c | D | E |
| 60. Gets his/her supenors to act for the wetfare of the group members. | A | B | C | D | E |

$$
\begin{aligned}
& A=\text { Always } \\
& B=\text { Often } \\
& C=\text { Oceasionally } \\
& D=\text { Seldom } \\
& E=\text { Never }
\end{aligned}
$$

| 61. Gets swamped by details | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 62. Can watt just so long, then blows up | A | B | C | D | E |
| 63. Speaks from a strong inner conviction | A | B | C | D | E |
| 64. Makes sure that his/her part in the group is understood by the group members | A | B | C | D | E |
| 65. Is reluctant to allow the members any freedom of action. | A | B | C | D | E |
| 66. Lets some members have authority that he/she should keep | A | B | C | D | E |
| 67. Looks out for the personal weifare of group members | A | B | C | D | E |
| 68. Permits the members to take it easy in their work | A | B | C | D | E |
| 69. Sees to it that the work of the group is coordinated | A | B | C | D | E |
| 70. His/her word carnes weight with superiors | A | B | C | D | E |
| 71. Gets things all tangled up | A | B | C | D | E |
| 72. Remains calm when uncertain about coming events | A | B | C | D | E |
| 73. Is an inspuring taiker | A | B | C | D | E |
| 74. Schedules the work to be done | A | B | C | D | E |
| 75. Allows the group a high degree of intiative | A | B | C | D | E |
| 76. Takes full charge when emergencies anse | A | B | C | D | E |
| 77. Is willing to make changes | A | B | C | D | E |
| 78. Drives hard when there is a job to be done | A | B | C | D | E |
| 79. Helps group members setule their differences | A | B | C | D | E |
| 80. Gets what he/she asks for from his/her supenors | A | B | C | D | E |
| 81. Can reduce a madhouse to system and order | A | B | C | D | E |
| 82. Is able to delay action until the proper time occurs | A | B | C | D | E |
| 83. Persuades others that hisher ideas are to their advantage | A | B | C | D | E |

$$
\begin{aligned}
& A=\text { Always } \\
& B=\text { Often } \\
& C=\text { Occasionally } \\
& D=\text { Seldom } \\
& E=\text { Never }
\end{aligned}
$$

| 84. Mantains definte standards of performance | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 85. Trusts members to exercise good judgment . . | A | B | C | D | $E$ |
| \$6 Overcomes attempts made to challenge his/her leadership. | A | B | C | D | E |
| 87 Refuses to explain his/her actions | A | B | C | D | E |
| 88. Urges the group to beat its previous record | A | B | C | D | E |
| 89 Anticipates probiems and plans for them | A | B | C | D | E |
| 90. Is working his/her way to the top | A | B | C | D | E |
| 91. Gets confused when too many demands are made of him/her | A | B | C | D | E |
| 92. Wornes about the outcome of any new procedure | A | B | C | D | E |
| 93. Can inspire enthusiasm for a project | A | B | C | D | E |
| 94 Asks that group members follow standard rules and regulations | A | B | C | D | E |
| 95 Permits the group to set its own pace | A | B | C | D | E |
| 96. Is easily recognized as the leader of the group | A | B | C | D | E |
| 97. Acts without consulung the group | A | B | C | D | E |
| 98. Keeps the group working up to capacity | A | B | C | D | E |
| 99 Maintans a closely knut group | A | B | C | D | E |
| 100. Maintains cordial relations with supenors | A | B | C | D | E |

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DATE: September 20, 1984
33-5 N. Unıversity Place
Stıllwater, OK 74074

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Permussions Assistant

## LEADERSHIP AUTHORITY SCALE

1. Compliments from the leader are appreciated than compliments from other group members
2. Compliments are highly valued, criticisms are considered damaging.
3. Leader can recommend punishments and rewards
4. Leader can punish or reward members on his/her own accord.
5. Leader can effect (or can recommend) promotion or demotion. . . .
6. Leader chairs or coordinates group but may or may not have other advantages. i.e., is appointed or acknowledged chairman or leader. .
7. Leader's opinion is accorded considerable respect and attention
8. Leader's special knowledge or information (and members' lack of it) permits leader to decide how task is to be done or how the group is to be proceed.
9. Leader cues members or instructs them on what to do
10. Leader tells or directs members what to do or what to say. . .
11. Leader is expected to motivate group. . . . . . . . . . . . . .
12. Leader is expected to suggest and evaluate the memberswork. . . $\square$
13. Leader has superior or special knowledge about the job, or has special instructions but requires members to do job.
14. Leader can supervise each member's job and evaluate it or correct
it. . . . . . . . . . . . . . . . . . . .
15. Leader knows his/her own as well members' job and could finish the work himself/herself, if necessary. e.g., writing a report for which all information is available.
16. Leader enjoys special or official rank and status in real life which sets him/her apart from or above group members, e.g., military rank or elected office in a company or organization.
17. Leader is given special or official rank by experimenter to simulate for role-playing purposes, e.g., "You are a general or Manager." This simulated rank must be clearly superior to members rank and must not be just that of chairman or group leader of group during its work period.
18. Leader's position is dependent on members; members can replace or depose leader.

## APPENDIX B

## PARTICIPATING INSTITUTIONS

## PARTICIPATING INSTITUTIONS

1. Ithaca College, Ithaca, New York.
2. Smith College, Northampton, Mass.
3. Wallace College, Berea, Ohio.
4. Gardner Webb College, Boiling Spring, North Carolina.
5. James Madison University, Harrisonburgh, Virginia.
6. Sunny College at Brockport, New York.
7. Springfield College, Springfield, Mass.
8. University of North Carolina, Greensboro, North Carolina.
9. Ashland College, Ashland, Ohio.
10. Bowling Green State University, Bowling Green, Ohio.
11. Howard University, Washington, D.C.
12. Syracuse University, Syracuse, New York.
13. University of Miami, Coral Gables, Florida.
14. University of Rhode Island, Kingston, Rhode Island.
15. Northeastern University, Boston, Mass.
16. Long Island University, Brooklyn, New York.
17. University of Maine at Orono, Orsno, Maine.
18. University of South Florida, Teıpa, Florida.
19. University of North Carolina, Chapel Hill, North Carolina.
20. Keene State College, Keene, New Hampshire.
21. Norwich University, Northfield, Vermont.
22. Wheaton College, Wheaton, Illinois.
23. Wilmington College, Wilmingtin, Ohio.
24. University of Wisconsin, River Falls, Wisconsin.
25. Wayne State University, Detroit, Michigan.
26. University of Wisconsin at La Cross, La Cross, Wyoming.
27. University of Montana, Missoula, Montana.
28. University of New Hampshire, Durham, New Hampshire.
29. Cleveland State University, Cleveland, Ohio.
30. Illinois State University, Normal, Illinois.
31. Indiana State University, Terrer Haute, Indiana.
32. Western Illinois University, Macomb, Illinois.
33. Southern Illinois University, Carbondale, Illinois.
34. University of Illinois at Chicago Cirle, Chicago, Illinois.
35. University of Illinois at Urbana, Champaign, Urbana, Illinois.
36. Indiana University, Bloomington, Indiana.
37. Kent State University, Kent, Ohio.
38. Purdue University, West Lafayette, Indiana.
39. University of Oregon, Portland, Oregon.
40. Eastern Washington University, Cheney, Washington.
41. Eastern New Mexico University, Portales, New Mexico.
42. Wartburg College, Waverly, Iowa.
43. Hutton Sports Center, Orange, California.
44. Utah State University, L^gan, Utah.
45. University of Northern Irina, Ceder Falls, Iowa.
46. Weber State College, Ogden, Utah.
47. Western Washington University, Bellingham, Washington.
48. Fort Valley State College, Fort Valley, California.
49. University of Colorado, Boulder, Colorado.
50. Oregon State University, Corvallis, Oregon.
51. Washington §tate University, Pullman, Washington.
52. California State University at Sacramento, Sacramento, California.
53. University of Northern Colorado, Greeley, Colorado.
54. University of Arizona, Tucson, Arizona.
55. Arizona State University, Tempe, Arizona.
56. University of California, Berkeley, California.
57. California State University at Fullerton, Fullerton, Californsa.
58. California State University, Northridge, California
59. Southwest Texas State University, San Marcos, Texas.
60. Mississippi University for Women, Columbus, Mississippi.
61. New Mexico Highlands University, Las Vegas, New Mexico.
62. Louisiana College, Pinevill, Louisiana.
63. Barry College, Miami, Florida.
64. Tulane University, New Orleans, Louisiana.
65. Georgia Southern College, Stateboro, Georgia.
66. Northwestern State University, Natchitoches, Louisiana.
67. University of Texas at Austin, Austin, Texas.
68. Florida A \& M University, Tallahassee, Florida.
69. Pan American University, Edenburg, Texas.
70. University of Alabama, University, Alabama.
71. UAB, Birmingham, Alabama.
72. Auburn University, Auburn, Alabama.
73. Georgia State $U_{1}$ iversity, Atlanta, Georgia.
74. University of Houston, Houston, Texas.
75. Louisiana State University, Baton Rouge, Louisiana.
76. University of New Mexico, Albuquerque, New Mexico.
77. Texas Tech. University, Lubbock, Texas.
78. George Washington University, Washington, D.C.
79. Stippery Rock State College, Slippery Rock, Pennsylvania.
80. Indiana University, Indiana, Pennsylvania.

VITA 2

Farik A. Hassan Kamouna
Candidate for the degree of
Doctor of Education
Thesis: AN ANALYSIS OF ADMINISTRATIVE LEADERSHIP BEHAVIOR AND AUTHORITY IN THE PHYSICAL EDUCATION DEPARTMENTS IN COLLEGES AND UNIVERSITIES IN THE UNITED STATES

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Minor Field: Health, Physical Education and Leisure Services.
Biographical:
Personal Data: Born in Baghdad, Iraq, on September 4, 1948, the son of Abdul Hassan Kamouna and Fatema Maryosh.

Education: Graduated from Al-Shaab High School, Baghdad, Iraq, in 1966; received the Bachelor of Science in Physical Education degree from the University of Baghdad in 1970, received the Master of Education degree from the University of Pittsburgh, Pennsylvania, in December, 1981; completed the requirements for the Doctor of Education degree from Oklahoma State University, Stillwater, Oklahoma, in May, 1985.

Professicnal Experience: Teacher of Physical Education in Saudi Araivia, 1970-1974; Coach of volleyball, Al-Horiya Youth Center, Baghdad, 1974-1976; Supervisor of Sport Section, Baghdad Youth Directory, Baghdad, 1976-1980; Manager of Al-Karkh Youth Center, Baghdad, 1980.


[^0]:    * Significant at . 05 level of significance.

[^1]:    * This suggestion was due to many statements from faculty members that there were more than one administrators' position in the department.
    **This suggestion was a result of many comments from leaders and faculty members to develop a new instrument to measure or describe behavior.

