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THE RELATIONSHIP BETWEEN LEADER BEHAVIOR, TYPE OF ORGANIZATION, AND ROLE CONFLICT

by

Sara Hamill Moniot

A Dissertation Submitted to the Faculty of the Graduate School at The University of North Carolina at Greensboro in Partial Fulfillment of the Requirements for the Degree Doctor of Education

Greensboro 1975

Approved by

Dissertation Adviser
This dissertation has been approved by the following committee of the Faculty of the Graduate School at The University of North Carolina at Greensboro.

Dissertation Adviser: R. H. Wilson

Committee Members: John Christian Buch, W. M. Mitchell, Nola L. Dentaker, L. Scott Black

Date of Acceptance by Committee: March 6, 1975
This study investigated the relationship between perceived leader behavior, type of organization, and the leader's perceptions of role conflict. The independent variables under investigation were the 12 factors of leader behavior, as measured by the LBDQ-XII instrument (Stogdill, 1963) and type of organization. The dependent variable was perceived role conflict, as measured by the Job-Related Tension Index (Kahn et al., 1964). The sample consisted of 8 leaders from an industrial organization and 15 leaders from an educational organization. Each of these leaders completed the Job-Related Tension Index. The scores on the LBDQ-XII were obtained from the responses of 130 subordinates (role senders).

Leader behavior was analyzed in two ways. The first analysis used the mean factor scores on the LBDQ-XII for each leader. This procedure is the usual method of measuring leader behavior using the LBDQ-XII. The second way in which leader behavior was measured used the difference scores, or the differences among role senders' perceptions of the leader's behavior, on each factor. This procedure was suggested by Fleishman (Fleishman & Hunt, 1973) in order to account for the leader's flexibility in different situations.
Each set of data was analyzed using the SPSS Multiple Regression program.

The results of the data analyses indicated that, for both sets of measures of leader behavior, type of organization correlated significantly with role conflict. None of the leader behavior variables, when construed as mean factor scores, significantly added to the relationship with role conflict. Two leader behavior variables (reconciliation and superior orientation), when construed as difference scores on each factor, significantly strengthened the relationship of the independent variables with role conflict.

Suggestions for future research included the replication of this study, using a larger sample size. It was also recommended that future research efforts be directed toward the conceptualization and measurement of situational leadership. The use of the LBDQ-XII factor difference scores is one possible measure of the leader's flexibility in different situations; this method of measuring leader behavior needs to be validated, however, before it can be considered an accurate measurement of situational leadership.
ACKNOWLEDGEMENTS

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CHAPTER I
INTRODUCTION

The purpose of this study was to investigate some of the factors which are related to a leader's perception of role conflict in two different types of formal organizations. A theoretical base for this study was provided by Fleishman (Fleishman & Hunt, 1973), in his discussion of the need for a more accurate measure of leader behavior, and by Kahn, Wolfe, Quinn, and Snoek (1964), in their comprehensive study of role conflict.

General Problem Area

Much of the literature on organizations' behavior deals with the concept of leadership. The topic of leadership is paramount to the study of any type of organization: industrial, military, governmental, or educational. Research on the dynamics of leadership has grown tremendously in the past quarter of a century. It is now well accepted that in order to fully comprehend the dynamics of leadership, one must have a basic understanding of the personalities of the leader and followers, and of the situation in which the interaction of the leader and followers occurs. Knowledge of the
factors present in any leadership situation increases one's understanding of the dynamics of the leadership process.

Because of the relatively recent origin of systematic research on leadership, many of the generalizations stemming from the research are questionable and have needed to be verified. Researchers have, therefore, concentrated on the verification of previous results, and other areas of organizational behavior, which may be related to the leadership process, have been relatively untouched. One area that has been overlooked is role conflict. This study investigated the relationship between leader behavior and role conflict, two variables which have not been studied by researchers in the area of organizational behavior.

The results of recent studies recommend that, if the leader or manager is to be effective in his role, he should exercise different leadership behaviors in different situations. Fiedler (1960) recommended fitting the leader to the situation to increase the probability of leadership effectiveness. While Fiedler's alternative is often impractical, it does reinforce the notion that some behaviors are more effective in certain situations than others.
It is important, therefore, for the leader to be perceptive and flexible. He must know himself and his followers, must have a "feel" for the situation in which he finds himself, and must adapt his behavior to the specific situation. No one style of behavior will be appropriate in every situation. As Fiedler (1973) implied, the definition of "style" as a "transsituational mode of relating or interacting with others" (p. 42) contradicts the idea of situational leadership. Leaders who are considered effective tend to change their behavior in different situations (Fiedler, 1965; Korten, 1962). For effective leaders, then, their behavior is situation-specific; they are aware that any one style or form of behavior is not effective with all followers and all tasks. These leaders exhibit different behaviors as the situations change. No one leadership style adequately describes their behavior over time.

Researchers (Blake & Mouton, 1964; Fiedler, 1965; Fleishman & Harris, 1962; Korten, 1962; Likert, 1961; Vroom, 1964; White & Lippitt, 1968) in the area of leadership, however, have continued to measure a leader's "style" as though his behavior were consistent over situations. This form of measurement, in fact, has been recommended by the formulators of the instruments used in research on leadership. One widely used instrument
which measures leader behavior is the Leader Behavior Description Questionnaire, formulated by Hemphill and Coons (1957) and modified by Halpin and Winer (1957). This instrument yields scores on two factors (consideration and initiating structure) which account for 83% of the total factor variance (Halpin & Winer, 1957). Stogdill (1963) revised the questionnaire and found 12 factors of importance in leader behavior; this measure, the Leader Behavior Description Questionnaire - Form XII (LBDQ-XII) yields 12 scores for each respondent. It should be noted that what are actually measured are the subordinates' perceptions of the leader's behavior on the 12 factors.

The manuals for the Leader Behavior Description Questionnaires (Halpin & Winer, 1957; Stogdill, 1963) suggest that a leader's style can be found by averaging the respondents' (followers') scores across the measured factors. The resulting means are considered measures of the leader's style of behavior. In view of the research which suggests that a leader may well behave differently in different situations, use of the factor means may be an inappropriate method of analysis.

No provision is made in either form of the Leader Behavior Description Questionnaire for determining leader behavior across situations, given different
followers and tasks. Fleishman (Fleishman & Hunt, 1973) recommended that a more adequate method of analyzing a leader's behavior is to use a measure of the variability of the respondents' scores on each factor. This method of analysis would take into account the possibility that a leader may exhibit, or may be perceived to exhibit, different behaviors with different individuals in the work situation. No research has been found using this procedure. This study, however, employed a method of analysis which accounts for the variability of the respondents' scores on each factor.

Another factor in leader behavior is the number of different roles a leader plays within the organization; at the least, he is both a follower to his superiors and a leader to his subordinates. Certain behaviors, which are often determined by the expectations of his role senders (Tumin & Bennett, 1948), are prescribed for him in each role. If he fails to adjust his behavior to fit each of these roles, he is likely to experience role conflict and the accompanying stress. Researchers (Cetzels & Cuba, 1954, 1955; Kahn et al., 1964) have concluded that role conflict results in the individual's reduced satisfaction with his job and effectiveness in his role. A frequent behavioral response to role conflict is the individual's avoidance of or
withdrawal from those who are perceived as creating the conflict, which results in less communication with the individual's co-workers (Kahn et al., 1964). Role conflict, therefore, is likely to affect a leader's behavior.

Much of the research on role conflict has been conducted in industrial or military organizations; the researchers (Kahn et al., 1964; Roethlisberger, 1945; Wray, 1949) generally have concluded that, within these organizations, individuals who work closely with both superiors and subordinates are likely to be subject to role conflict. Little research on role conflict, however, has been undertaken in educational organizations, particularly at the college level. University administrators must also deal with superiors and subordinates, as well as with faculty members who are in neither category. It is possible that these administrators are also likely to experience role conflict. Thus, a lack of research on role conflict in educational institutions led this researcher to examine the specific relationship between leader behavior and role conflict in two types of organizations: educational and industrial.
Statement of the Problem

This study was designed to investigate the relationship between leader behavior, type of organization, and the leader's perceptions of role conflict. The independent variables included in this study were the 12 factors of leader behavior, as measured by the LRDQ-XII (Stogdill, 1963), and the type of organization, educational or industrial. The dependent variable under investigation was perceived role conflict, as measured by the Job-Related Tension Index (Kahn et al., 1964).

Significance of the Study

This study represented an attempt to conceptualize and measure the situational nature of leader behavior. Many writers in the area of leadership recognize that a leader's behavior changes with the situation (which includes the group of followers and the task at hand); but, researchers have continued to measure and discuss leader behavior as if it were a stable characteristic. One of the most significant aspects of this study, therefore, was its utilization of a different method to measure leader behavior, in order to account for the flexibility of this behavior over different situations.
This study also represented an attempt to add to the present body of knowledge on organizational stress and, in particular, role conflict. Little research, with the exception of those studies previously mentioned, has been undertaken using role conflict and the literature relating the leader's perceptions of role conflict with his behavior is meager. Since role conflict is a potentially debilitating variable in organizations, it is important that its relationship to the behavior of the individual experiencing role conflict is known. Since the literature has suggested that middle-level managers are most likely to experience this conflict, it is their perceived behavior that was of interest to this researcher.

A third significant aspect of this study was its attempt to relate the type of organization to role conflict. Much of the research in the area of role conflict has been conducted in industrial or military organizations. One type of organization which this researcher investigated was the educational organization, specifically the university. Thus, this study supplemented the literature on role conflict in industrial organizations and investigated such conflict in educational organizations as well. This investigation should give
organizational leaders as well as social scientists a better understanding of role conflict in formal organizations.

Assumptions and Limitations

This study contained two basic assumptions. The first assumption was that the role senders' responses on the LBDQ-XII accurately reflect their perceptions of a particular leader's behavior. Researchers, when discussing a leader's score on a particular instrument, tend to consider the score as an actual measurement of the leader's behavior. In reality, however, this score represents how the respondent perceives the leader to behave. It was the respondent's perceptions of how the leader behaves, rather than the leader's perceptions of how he himself behaves, that were of interest to this researcher.

The second assumption of this study was that high variability of scores for an individual leader on the LBDQ-XII means that the role senders perceive that the leader treats them in an individual manner. The actual behavior of the leader, however, was of little concern to this researcher, since the LBDQ-XII measures role senders' perceptions of the leader's behavior. Differences
among factor scores indicate that the leader is perceived to act in one way with some of his role senders and in a different manner with another group of role senders. This assumption, while not yet tested in the literature, has been suggested by the conclusions of several researchers (Fiedler, 1965; Fleishman & Hunt, 1973; Korten, 1962).

Several conditions limit the generalizability of this study. The samples chosen were taken from only two organizations, a textile company and a university, which were chosen because of the number of possible subjects at the third level of each organization's hierarchy. This researcher's familiarity with each organization and each one's proximity to Greensboro were other factors in their choice. The researcher chose a sample of sub-units within each organization's corporate structure, and selected leaders from the sub-units whose positions placed them at approximately the third level in the organization's hierarchy. The literature has suggested that these individuals are considered the real leaders within organizations (Gardner & Whyte, 1945; Gibb, 1966; Roethlisberger, 1945; Wray, 1949). This researcher is aware that the conclusions of this study may be generalized only to these two types of institutions,
since a random sample of all industrial and educational organizations was not used.

The size of the sample, which included a total of 23 leaders and 130 role senders, was another limiting factor. Small samples tend to inflate the multiple correlation coefficient (R) used in the study. As a result, a researcher replicating this study with a larger sample might obtain a different multiple correlation coefficient.

Definitions of Terms

For the purpose of this study, several concepts assumed specific meanings:

1. **Leader Behavior** - role senders' perceptions of the leader's actions, as measured by the LFDQ-XII.

2. **Leadership** - "interpersonal influence, exercised in a situation, through the communication process, toward the attainment of a specialized goal or goals" (Tannenbaum, Weschler & Massarik, 1961).

3. **Role** - the set of complementary expectations about behavior involving both the occupant of the position and other individuals within the organization (Getzels & Guba, 1955).

4. **Role Behavior** - "those behaviors which are system relevant (though not necessarily congruent with
the expectations and requirements of others), and which are performed by a person who is accepted by others as a member of the system" (Kahn, et al., 1964, page 18).

5. **Role Conflict** - psychological conflict, as measured by the Job-Related Tension Index, arising when one or more members of an individual's role set hold differing expectations about the individual's behavior and impose pressures on him to change his behavior (Kahn, et al., 1964).

6. **Role Senders** - members of the individual's role set who hold specific expectations about the individual's behavior in his role. These individuals are classified as subordinates.

7. **Subordinates** - the group of role senders who are directly responsible to the leader in the organizational chain of command. These individuals are usually one level below the leader in the organizational hierarchy.

The following terms represent the 12 subscales of the LBDQ-XII, and their definitions are taken from the manual for the instrument (Stogdill, 1963):

1. **Representation (REP)** - speaks and acts as the representative of the group.

2. **Demand Reconciliation (REC)** - reconciles conflicting demands and reduces disorder to the system.
3. **Tolerance of Uncertainty (TUN)** - is able to tolerate uncertainty and postponement without anxiety or upset.

4. **Persuasiveness (PER)** - uses persuasion and argument effectively; exhibits strong conviction.

5. **Initiation of Structure (STR)** - clearly defines his own role, and lets followers know what is expected.

6. **Tolerance of Freedom (TFR)** - allows followers scope for initiative, decision and action.

7. **Role Assumption (ROL)** - actively exercises the leadership role, rather than surrendering leadership to others.

8. **Consideration (CON)** - regards the comfort, well-being, status and contributions of followers.

9. **Production Emphasis (PRO)** - applies pressure for productive output.

10. **Predictive Accuracy (PAC)** - exhibits foresight and ability to predict outcomes accurately.

11. **Integration (INT)** - maintains a closely knit organization; resolves intermember conflicts.

12. **Superior Orientation (SOR)** - maintains cordial relations with superiors; has influence with them; is striving for higher status.
CHAPTER II

REVIEW OF THE LITERATURE

The literature in the area of leadership has undergone a tremendous development in the last 50 years. Research in the area began with the idea that a leader possesses certain personality characteristics which distinguish him from a non-leader; this idea was later discarded in favor of the view that a leader is only one part of the process of leadership, which includes the leader, the followers, and the situation. This chapter will describe the leadership process and will present a brief history of its development. It will be followed by an in-depth discussion of the most recent and significant ideas on leader behavior. The latter part of the chapter will focus on the literature regarding the roles a leader plays within an organization; because these roles may be numerous, the leader often finds himself experiencing role conflict. Finally, the implications for leader behavior and role conflict will be discussed.

The Leadership Process

Questions concerning the process of leadership have been raised by nearly every writer in the field of
organizational behavior. One adaptable description of leadership emphasizes its influence aspect: "Leadership acts are actions by persons which influence others in a shared direction" (Seeman & Morris, 1950, p. 1). This conceptualization stresses a positional relationship between the leader and some other persons, with the leader's position defined in terms of his relatively greater degree of influence. Leadership, then, takes into account more than simply an attribute of a position or a characteristic of a person; at least two components of leadership are implied: the influencing agent and the one or more persons being influenced.

It becomes evident that two factors are insufficient to describe the leadership process. Katz and Kahn (1966), in their discussion of the importance of leadership to any organization, discussed the presence of a third factor, the situation or environment in which the process of influencing or leading occurs. A more appropriate description of the concept of leadership, then, is the personality-environment relationship occurring when a person is placed in an environment so that "his will and insight direct and control others in the pursuit of a common cause" (Pigors, 1935, p. 12). Pigors' description implies that three factors are present in the leadership process: the leader, the followers, and the situation.
It is important to understand that leadership is a process, an ongoing interrelationship among three factors: the leader, the followers, and the situation. This interrelationship suggests a question which has been debated in the literature for almost fifty years: What, in fact, is a leader? An interesting point of view was supplied by Redl (1942), who introduced the concept of "central person" and distinguished 10 different types of relationships between the central person and the other group members: Only one type of relationship was classified as leadership—that characterized by love or respect of the group members for the central person, resulting in the incorporation of the personality of the central person into the ego ideal of the followers. The leader, therefore, seems to be central to the group's existence.

Another view of the leader is that of Selznick (1957), who described a responsible leader as one who blends commitment, understanding, and determination. He is able to transcend his own specialty and is cognizant of the potential of the group or organization. Often, the group's survival is explained in terms of the leader (Katz & Kahn, 1966). The importance of the group of followers to any leader begins to emerge.
The leader, in choosing to lead, often anticipates or expects certain results, some of which are classified in terms of the satisfaction of his needs. An individual may attempt to lead more often if the rewards for the accomplishment of the task are high, and if he believes that his leadership attempt will result in group success; he is hopeful of his acceptance by the group, and the strength of this expectation may be the result of his expertise relevant to the task or to his previously acquired status as group leader (Hemphill, 1961). He may also have a high need for achievement and/or power (Cartwright & Zander, 1960), such that "leading" the group to the accomplishment of these tasks helps to satisfy these needs.

The follower, on the other hand, may have different expectations or needs; yet, by virtue of his role as follower, he may profit from the relationship (Gibb, 1969). He may gain assistance in the accomplishment of the task and his dependency needs may be satisfied when he is in a group. This may (as Redl implied) result in vicarious satisfaction through identification with the leader. Regardless of the motivation, however, it is important to realize that the agent's (that is, the leader's or follower's) perceptions of the process is an important consideration (Hemphill, 1961).
Theories of Leadership

Having discussed the process of leadership, the three theories of leadership, as postulated by Gibb (1969), will be considered. The earliest theory of leadership was the unitary trait theory, which stated that a single trait characterized leaders wherever they are found. None of the available research supports this idea.

A second theory of leadership, which was actually a modification of the unitary trait theory, was the constellation of traits theory. This theory supported the notion that, in each leader, one can discern a pattern of traits which constitutes his leadership ability. In the constellation of traits theory, as in the unitary trait theory, leadership was based in the personality of the leader. From this framework, the Great Man Theory of leadership evolved. According to Borgatta, Bales, and Couch (1954), the all-round leader or great man remains an all-round leader over a number of situations, due to the stability of his personality characteristics. Groups containing "great men" tend to produce more and maintain a high level of agreement. These groups also develop solidarity and release tension (although tension is usually present to a lesser degree) more rapidly than
groups without great men. The most effective groups, according to this theory, contain all-round leaders or great men.

An extensive review of the literature was conducted by Stogdill in an attempt to discover the most important personality traits in this constellation. In summary, Stogdill (1948) found that the pattern of personal characteristics of the leader bears some relationship to the characteristics, activities, and goals of the followers. According to Stogdill, therefore, leadership is the result of the interaction of numerous variables in a constant state of flux.

As a result of Stogdill's research over 25 years ago, the idea of leadership as a constellation of measurable traits evident in social interaction was discarded. No longer was leadership considered a function of the leader's personality alone. A third theory of leadership, interaction theory, resulted, upon which most of the recent literature on leadership is based.

Interaction theory postulates that leadership results from the interaction of the leader and the followers in a specific situation (Gibb, 1969). Bennis (1961) concluded that this interaction occurs in such a way that both the leader and the followers obtain maximum satisfaction. Three trends in the interaction
theory of leadership have been evident during the last 50 years: the Scientific Management Movement, the Human Relations Movement, and the Revisionist Movement. The Revisionist Movement was an attempt to reconcile the weaknesses of the Scientific Management and Human Relations Movements; this movement integrated the two earlier models of interaction theory, culminating in an operationalization of the interaction between the leader, the followers, and the environment.

**Styles of Leadership**

Using the frame of reference of the Revisionist Movement, writers in the field began to delineate various leadership styles. Three basic styles of leadership have received publicity in the research in recent years: laissez-faire, autocratic, and democratic.

Laissez-faire leadership involves little task direction and actually allows the followers total freedom in the decision-making process. One might call this type of leadership the absence of leadership; frustration on the part of the employees and poor quality work (White & Lippitt, 1968) often results from laissez-faire leadership. Lippitt and White (1943) assigned the remaining two styles of leadership to opposite ends
of a continuum, based on subordinates' participation in the decision-making process.

In the authoritarian style of leadership, the leader makes the decision on his own without consultation with subordinates. The leader is the focus of group attention and emphasis is placed on the followers' obedience to the directives of the leader. Authoritarian leadership, according to White and Lippitt (1943), leads to increased hostility, less follower motivation and communication, and, as a result, lower employee (follower) morale. Should the autocratic leader suddenly withdraw from the situation, chaos and confusion result. Lippitt and White assigned democratic leadership to the opposite end of the continuum. Consequences of permitting followers to become a part of the decision-making process are that more is accomplished where the followers assume greater responsibility for decisions; worker satisfaction and motivation are also highest on this end of the continuum, as are originality and viscosity. The literature demonstrated that the leader who involves his followers in the decision-making process to the greatest extent tends to exercise the greatest amount of influence over the followers (Selvin, 1960).

Another system of leadership styles was described by Rensis Likert (1961). Likert placed these styles on
a continuum, discriminating between degree of production-centered and employee-centered supervision. Workers tend to produce more when supervised by employee-centered managers, rather than by managers who are solely concerned with the task at hand; the conditions of work are most satisfying to the employee under employee-centered supervision. For employee-centered leadership to exist and be workable, however, it is necessary for the lines of communication between management and workers to remain open and for both groups to have input into the decisions that are made.

Indications are that the most successful leader or managers involve the followers in decisions which are made; this is supported by the idea that one is more likely to be committed to a decision into which he has had input. It appears, then, that one style of leadership tends to be most effective over time. Most of the literature on leadership behavior, however, contradicts this idea; rather, it supports the viewpoint that a leader needs to utilize varying styles of leadership, depending on the differences in the variables (leader, follower, and situation) involved, in order to be effective. Some of the current positions regarding leadership behavior follow.
Leadership Behavior

Much of the research in the area of leadership behavior has been undertaken from one of three frameworks: leader's concern for his followers, leader's assessment of the situation, and the interaction of the leader's personality and the situation in which the leadership attempt occurs. The literature falling into each of these three frameworks follows.

Leader's Concern for Followers

Probably the earliest comprehensive research on leadership behavior were the Michigan Studies (1946) under the direction of Rensis Likert. As a result of these studies, five dimensions of leader behavior were found: "leader's definition of the leadership role, leader's orientation toward the work group, closeness of the leader's supervision, quality of this relationship with his followers, and type of supervision the leader received from his superiors" (Cribbin, 1972, p. 33). The second dimension, orientation toward the work group, was then broken into two groups: employee-centered and production-centered orientation. It is this dimension which received the most attention in succeeding attempts to understand leader behavior.
The Ohio State Studies, under the direction of Carroll Shartle, discussed leader behavior as a function of the consideration-initiating structure continuum. This continuum corresponds to the second dimension of leader behavior as found in the Michigan Studies: leader's orientation toward the work group. Consideration was defined as "the rapport between supervisor (leader) and workers (followers) and is characterized by mutual trust, which encourages worker participation and two-way communication" (Cribbin, 1972, p. 35). At the other end of the continuum is initiating structure, which was described as the "leader's emphasis on the efficiency of attaining the objectives of the department or organization" (Cribbin, 1972, p. 35). Consideration and initiating structure are variables which are identical to Likert's notion of employee-centered and production-centered leadership and are considered to be the factors which differentiate leadership behaviors.

Later studies in the area of leader behavior used these factors, consideration and initiation of structure, as the basis for distinguishing between effective and ineffective leadership. Fleishman and Peters (1962) concluded that consideration and initiating structure were the two major dimensions of leader behavior; they found them to be truly independent dimensions ($r=-.02$) but not mutually exclusive. Fleishman and Harris (1962)
found that supervisors with low consideration for workers were ineffective leaders. Another important result of Fleishman and Harris' research was the idea that supervisors rating high in consideration for workers could indulge in higher levels of structuring or task emphasis without a significant loss of efficiency or effectiveness. It was concluded that both dimensions of leader behavior are desirable, yet it is important for the leader first to establish a strong rapport (high consideration) with his followers; emphasis on the task at hand can then follow without concurrent loss of consideration.

Blake and Mouton (1964) proposed that leadership behavior falls into one of five general categories, depending on the leader's concern for people (followers) or concern for production. Again, the decisive variable in leadership is the superior's orientation toward his work group. Blake and Mouton established the Managerial Grid, using the horizontal axis to show a concern for production and the vertical axis to depict the leader's concern for people. Style 1,1 indicates minimal, if any, concern for either task or workers, while style 1,9 represents a minimal concern for production and a maximum concern for workers. Implicit in the research of Blake and Mouton is the assumption that the 9,9 style of leadership (high concern for both people and production)
is optimal for achieving results in terms of both task and personal development.

Another conceptualization of leadership behavior is the Life Cycle Theory of Blanchard and Hershey (1972). The Life Cycle Theory of Leadership attempted to provide an understanding of the relationship between an effective style of leadership and the level of maturity of the followers. The emphasis was on the interaction of the leader and followers, since the latter group most often determines the amount of personal power a leader maintains (Sanford, 1950). Maturity was defined as the "group's willingness and ability to take responsibility and its task relevant education and experience" (Blanchard & Hershey, 1972, p. 134). Blanchard and Hershey contended that, with followers at a low level of maturity, the leader's behavior should be more structure-oriented; as the level of maturity of the followers increases, the leader's behavior should become less structure-oriented. Again, leader behavior was determined by the characteristics of the followers.

These theories constitute the major portion of the literature on leadership behavior, using the leader's orientation toward the work group as the frame of reference. The consideration - initiation of structure continuum formed the basis of the measurement of leader behavior under this framework.
Leader's Assessment of the Situation

The second frame of reference used by writers in the area of leader behavior is the leader's assessment of the situation in which he finds himself. Emphasis on the task to be performed assumes more importance under this framework than in the previously mentioned theories. A summary of the major works of the writers operating from this framework follows.

An important conceptualization of leader behavior, emphasizing the leader's assessment of the situation, was that proposed by Vroom (1964; Vroom & Mann, 1960; Vroom & Yetton, 1973). Vroom's model of effective leadership postulates five possible leadership styles:

\[ L_1 \] - The leader makes the decision on his own without consulting his followers. He relies on previously acquired information and any written documents available to him. He assumes total responsibility for the decision;

\[ L_2 \] - The leader makes the decision after attempting to gain information from his followers. He may see them individually or in a group and he may or may not reveal the problem to them. He assumes total responsibility for the decision;

\[ L_3 \] - The leader shares the problem with a select group of his followers in order to gain additional information. He seeks their opinions as to possible solutions to the problem. He assumes total responsibility for the decision;
LF₂ - The leader consults all his subordinates and together, they discuss possible alternatives or solutions to the problem, which he has revealed to them. The leader tells them he may or may not accept their opinions. He assumes total responsibility for the decision;

M - The leader shares the responsibility and authority for the decision with his followers. He defines the problem and provides any information he has. The group becomes the decision-maker. The leader does not try to influence the other members of the group. Together they come to a consensus, but the leader assumes total responsibility for the decision.

The two variables upon which these leadership styles are based are the quality and acceptability of the resulting decision. Depending upon whether the leader is looking for a "good" decision, or a decision that will be accepted by the followers, one of the above styles is more likely to produce the desired results. Vroom's model incorporates the idea that the leadership process is a function of the leader's assessment of the situation in which the decision occurs. It should be noted here, however, that the Vroom model does not explicitly discuss the notion of how much time is available in which to make the decision. Practically, this is an important consideration in the leadership process.

Tannenbaum and Massarik (1957) provided another description of the leadership process which emphasized the leader's assessment of the situation. The leadership
process is broken into components of leader behavior, each of which is necessary for the effectiveness of the overall process: leader's personality, his perceptual flexibility, the leader's decision as to the relevance of the stimuli, his social sensitivity, the leader's psychological map, his action flexibility, and his communication behavior. More evidence was presented that the process of leadership involves not only the leader himself, but also his followers and the situation or environment in which the process takes place. It is evident, however, that the extent to which the process is effective is dependent upon the leader's flexibility, and his assessment of the situation, including what he and his followers bring to the situation.

Another theory of leadership which has received considerable attention in the literature is the Contingency Theory of Fiedler. According to Fiedler (1967), the success of the leadership effort is contingent upon the degree to which the leadership situation provides the leader with influence. The four elements in the particular environment which determine the amount of influence the leader possesses are the "leader-follower relationship, the structure of the task, the leader's positional power, and the degree of stress in the situation" (Cribbin, 1972, p. 38).
In order to determine the relationship between leadership style and the favorableness of the situation for leadership, Fiedler (1965) categorized eight different group-task situations in terms of three of the above variables: leader-follower relationship, task structure, and the leader's positional power. He found that authoritarian or directive leadership characterizes effective groups under both very favorable (when the leader has power, when good leader-follower relations exist and when the task is clearly structured) and very unfavorable (when the leader lacks power, does not have the confidence of the group and the task is ambiguous) conditions for leadership. Where the group faces an ambiguous task or where the leader-follower relations are tenuous, a more democratic style of leadership is most effective.

The research of Korten (1962) also supported Fiedler's conclusions. Korten found that where group goals assume greater importance than individual goals, and ambiguities obscure the path to the attainment of these goals, authoritarian leadership is sought to reduce these ambiguities; if the ambiguities are not of a stress-creating nature (that is, if they do not stand in the way of goal achievement) and the attainment of group goals is not seen as a necessary prior event to the
attainment of individual goals, a more democratic style of leadership is appropriate.

**Interaction of the Leader's Personality and Situation**

The third framework of leader behavior stressed by writers in the area considers leadership to be the result of the interaction of the personality of the leader with the specific situation in which the leadership attempt is made. For their purposes, the writers consider the situation to include personalities and needs of the followers, the task at hand, and the atmosphere or type of organization in which the attempt occurs.

Barnlund (1962) used this frame of reference. He found that both the nature of the task and the composition of the group determined who emerged as the leader in an experimental group. Fiedler's more recent research (1971) also suggested that both the situational factors and the leader's personality attributes interact in determining leader behavior. Tannenbaum and Schmidt (1958) concluded that three factors are important in determining the behavior of the leader: the personality traits of the leader, the desires and expectations of the followers, and the characteristics of the situation.

The recent literature in the area of leadership stresses that effective behavior is truly a function of
the leader himself, his followers, and the specific task at hand. The writers in the area fall into three categories: those using the leader's orientation toward his followers as their base, those whose frame of reference emphasizes the leader's assessment of the situation, and those who consider leadership as the interaction of the leader's personality and the situation. Regardless of the framework, however, it is clear that the leader must be able to diagnose the situation accurately and be flexible in his behavior. It also becomes evident that no one style of behavior is always effective over time. In fact, if one defines style as "a transsituational mode of relating or interacting with others", as Fiedler (1973, p. 42) did, it becomes irrelevant and even misleading to speak of a leader's style. Most of the research in the area, however, continues to measure a leader's style as if his behavior were held constant over situations. A discussion of the methodology used in the research on leadership follows.

Methodology

The last 20 years in the study of leadership have been productive and enlightening. One of the prime concerns of researchers in the post-trait era was the
formulation of a measure to describe how a leader carries out his activities. Coons and Hemphill (1957) attempted to isolate leader behavior from other types of behavior. They and their associates at Ohio State University formulated a list of 9 (later expanded to 10) tentative dimensions of leader behavior, and constructed a 150-item questionnaire - Leader Behavior Description Questionnaire (LBDQ). The LBDQ was designed so that respondents describe the behavior of the leader in question. The questionnaire was then administered to 357 individuals, 205 of whom described the behavior of another leader and 152 of whom described their own leadership behavior. The results indicated that, as anticipated, the 10 behavior dimensions were not independent; many showed a great deal of overlap with each other. As a result of factor analysis, three factors emerged: maintenance of membership character, reflecting behavior which is socially agreeable to group members; drive toward goal achievement, relating to the group's production; and group interaction facilitation, which concerned the mechanics of group interaction. As a result of these findings, researchers moved one step forward in their attempt to objectively describe and measure leader behavior.

The LBDQ, as formulated by Coons and Hemphill, was modified by Halpin and Winer (1957) for use in their
study of Air Force Personnel. Their modification included reducing the original 150 items in the questionnaire to 130. Factor analysis of the results yielded four stable and relatively independent factors: consideration, indicating mutual trust, respect and empathy for the followers; initiating structure, showing the degree to which the leader organizes and structures his relationship with his followers; production emphasis, indicating the extent to which the leader motivates his followers to greater production; and sensitivity or social awareness, demonstrating the extent to which the leader "sizes up the situation" (Halpin & Winer, 1957, p. 44). Since factors I and II (consideration and initiating structure) accounted for over 83% of the total factor variance, factors III and IV were removed from consideration. A short form of the LBDQ, which included 80 items, was then formulated, utilizing items which described the factors of consideration and initiating structure.

Fleishman (1957), basing his research on that of Halpin and Winer and Coons and Hemphill, developed a leader behavior description for industry, the Supervisor Behavior Description Questionnaire. The questionnaire included 28 items measuring consideration and 20 items measuring the initiating structure factor. The results of his research indicated that these two factors were
indeed independent \((r = -.02)\). Fleishman reported that the test-retest reliability of the instrument was .87 for the consideration factor and .75 for the initiating structure factor. Another useful measure of leadership behavior resulted.

By the early 1960's, it seemed reasonable to question whether two factors (consideration and initiating structure) accounted for all the variance in leader behavior. Stogdill (1959) theorized that several patterns of behavior operate to allow a group member to become the leader of a group. His theory and succeeding research suggested that several factors are important to leader behavior, although not equally important to all situations. The factors included: representation, demand reconciliation, tolerance of uncertainty, role assumption, persuasiveness, initiation of structure, tolerance of freedom, consideration, production emphasis, predictive accuracy, integration, and superior orientation (Stogdill, 1963).

A questionnaire was then developed, using items designed to measure these 12 factors. After three revisions, the LBDQ-XII resulted, which yields a single score for each of the 12 subscales or factors. The reliability coefficients for the various subscales were found, using a modified Kuder-Richardson formula, and ranged from .55 to .91 (Stogdill, 1963). Experimental
validation of several of the subscales also was reported (Stogdill, 1969). Schriesheim and Kerr (1974) reported that its contents appear to be reasonably valid and it does not confound frequency of behavior with magnitude. The LBDQ-XII represents a multi-factor approach to the measurement of leader behavior.

The instruments previously described were originally developed as measures of leader behavior, described in terms of the frequency of its occurrence (Shartle & Stogdill, 1955). Although the measures were found to be reliable and valid, they were designed so that responses on the items could be summed, yielding a score on each factor for each respondent. It has been generally accepted that a leader's "style" of behavior could be measured by averaging the respondents' scores on each factor. The literature has suggested, however, that a leader may react differently in different situations and with different followers, indicating that a mean factor score is not an appropriate measurement. A more appropriate measure of leader behavior, as suggested by Fleishman (Fleishman & Hunt, 1973, p. 40), may be an analysis of the variability in the respondents' scores. This would imply that a leader whose followers (the respondents in the questionnaire) showed high variability in scores was perceived to treat his followers as
individuals, adapting his behavior to the particular individual and situation. No research was reported using this methodology.

Role of the Leader

The recent literature in the area of leadership presents a strong case for the leader or middle-level manager in an organization to adapt his behavior to the situation in which he finds himself; he may assume different roles in his tenure as leader, depending upon the demands of the group of followers and the task at hand. It becomes important for the leader to assess the situation and define his role accurately. The leader who fails to do this is likely to be subject to role conflict and the ensuing stress. The literature in the area of role conflict, as well as how role conflict is likely to affect a leader, follows.

An individual's role within an organization is said to be a "set of complementary expectations about behavior involving both the occupant of the role and the other individuals within the organization" (Getzels & Guba, 1955, p. 74). As Tumin and Bennett (1948) reported, one's behavior is often the result of his definition of the situation; this definition is restricted by those with whom the individual interacts. This can be applied
to the behavior of the leader, which is often determined by the expectations of his followers. To the extent that the followers or role senders exert pressure on the leader (focal person) to exhibit differing (and often contradictory) behaviors, the leader will experience a psychological conflict (Kahn et al., 1964).

**Types of Role Conflict**

Kahn et al. (1964) described four basic types of role conflict: intrasender, intersender, inter-role, and person-role conflict. Intrasender conflict results from differing and incompatible proscriptions and prescriptions held by a single member of the individual's role set. Intersender conflict results from incompatible demands or pressures from different members of the individual's role set; the role occupant finds it difficult to exhibit any course of action that will satisfy both sets of expectations (Merton, 1940). Inter-role conflict results from incompatible pressures that are exerted on the individual because of his responsibility for more than one role. Person-role conflict results from the incompatibility of the individual's expected behavior in his work and his personal needs, values, and beliefs.
Any one or more of these types of role conflict can and often does occur in an organization. Role conflict, however, is not solely a function of the individual occupant of the role. Organizations, by their very nature, provide the framework for this conflict in their role requirements. Kahn et al. (1964) distinguished three major organizational determinants of conflict: the pressure on the individual to produce innovative solutions to non-routine problems, the responsibilities that cause individuals to cross organizational or departmental boundaries, and the job of supervision. Seeman (1953) proposed that role conflict has its origins in the differences between institutional requirements and reference group expectations, between factions within a given reference group, or between reference groups themselves.

Regardless of its origin, role conflict is a fact of life in most organizations. For some individuals, the results of role conflict are not necessarily harmful, but provide a basis for individual achievement and social progress (Kahn et al., 1964); role conflict, then, may facilitate an individual's adaptation to changing circumstances. Many individuals, however, do not react so favorably. According to Katz and Kahn (1966, p. 56), 48% of all male wage and salary workers in their
sample were caught in the middle between two sets of people who wanted different things from them. This is the case with the middle-level manager. In many organizations, he is considered the real leader (Gardner & Whyte, 1945; Roethlisberger, 1945; Wray, 1949), even though he must play a dual role. He must accept the norms and values of his superiors, and, therefore, serves as the agent of an impersonal and coercive organization of which he is a part; if effective, his superiors regard him highly. At the same time, he must win the willing followership of his subordinates so that he exercises the influence which they have given to him; he is rated highly to the extent that he shows consideration and represents them to the overall organization (Gibb, 1966).

Thus, the middle-level manager or leader is faced with a dilemma; the expectations of his superiors differ from those of his subordinates. Whichever set of expectations he chooses to follow could conflict with the expectations of the other group. In this situation, the focal person (leader) is likely to experience a most uncomfortable and stressful psychological state, which is often perceived as frustrating and threatening (Getzels & Cuba, 1955).

Kahn et al. (1964, p. 380) reported several affective and behavioral reactions to role conflict. The emotional costs of role conflict for the individual
include feelings of dissatisfaction with his job, lack of confidence in the organization, and increased job-related tension. Frequent behavioral responses to role conflict include the individual's avoidance of or withdrawal from those who are perceived as creating the conflict. Communication between the focal person and those role senders considered to have precipitated the conflict is reduced; trust in and respect for the role senders also tends to diminish.

Kahn and his associates (1964) developed an instrument to measure the extent of role conflict. The original form of the Job-Related Tension Index consisted of 14 statements covering a variety of job-related problems; in their intensive study, the researchers asked the focal person to indicate the degree to which he was affected by each problem. The later version of the instrument (Kahn et al., 1964) lists a total of 15 items, the result of a revision by the researchers. This instrument has been used extensively by the Survey Research Center at the University of Michigan to measure role conflict.

**Role Conflict and Leader Behavior**

What implications, then, does role conflict have for the leader? It would seem, based on the literature,
that the individual adopting a single leadership style with most, if not all, of the individuals with whom he works, is likely to be subject to pressure to change his behavior to conform to the expectations of his role senders. Although little research has been directed toward this question in particular, it would seem that the leader whose behavior is more flexible, allowing him to adapt his behavior to the particular group of followers and the situation, would be in a better position to conform to the expectations of the role senders and, thus, experience less role conflict. The findings of Pelz (1952) and Likert (1961) tend to support this idea. They found that the effective leader identifies with both superiors and subordinates, is both a good leader and a good follower, and is better able to satisfy the expectations of both superiors and subordinates. It would seem, then, that he would experience little role conflict.

Summary

The review of prior research in this chapter described the development of knowledge about leadership and concentrated on the literature supporting the flexibility of the leader's behavior. A description of the methodology of the leadership research was discussed. It was concluded
that this methodology is inadequate since it yields a measure of the leader's average behavior and does not allow for flexibility in that behavior. An alternate approach to the measurement of leader behavior was proposed, using the variability of respondents' scores on the LBDQ-XII. The literature in the area of role conflict was summarized, and the chapter was concluded with a discussion of the leader's propensity to experience role conflict. Nowhere in the available literature was a study involving leader behavior, from the framework of variability over situations, and perceived role conflict found.
CHAPTER III
RESEARCH DESIGN AND METHODOLOGY

This chapter will discuss the research design and methodology utilized in this study. This discussion includes descriptions of the subjects, variables, and instruments employed in the study, as well as the method of data analysis which was used.

Subjects

Subjects for this study were selected from an industrial and an educational organization, thereby yielding data on institutions of two different types.

Organization A was a large textile company whose corporate headquarters are located in the Greensboro area. This organization was chosen because of the researcher's contact with the industrial psychologist of the organization. (It was through this individual that the researcher obtained permission to use many of the organization's members as subjects.) Organization A employs over 10,000 individuals, and it maintains mills throughout North Carolina and neighboring states. The
organization's top five levels of management,\textsuperscript{1} with the exception of those in marketing, work in the Greensboro area. Thus, a sizeable population of leaders was available.

The industrial psychologist and this researcher discussed which corporate officers were considered at the third, or middle, level of management within Organization A. The selection as a possible participant in the study was determined by the individual's level in the corporate hierarchy, that at least four individuals reported directly to him and that his tenure in his position exceeded three years. Of the eight individuals who satisfied these criteria, all agreed to participate in the study. The range of these leaders' affiliations with Organization A was 4 to 27 years.

Organization B was a publically-supported university with 16 branches throughout the state. Each branch is financially independent of the other branches, and each maintains a distinct administrative staff. After consultation with several university administrators, the researcher concluded that the third, or middle, level of management within Organization B corresponded to the position of dean.\textsuperscript{2}

\textsuperscript{1}The levels of management in Organization A include: President (Level One), Vice Presidents (Level Two), Vice President and General Managers (Level Three), Directors (Level Four), and Assistant Directors (Level Five).

\textsuperscript{2}The levels of management in Organization B included: Chancellor (Level One), Vice Chancellors (Level Two), and Deans (Level Three).
The same criteria for choosing the participants from Organization A applied to Organization B. In addition, however, it was important that the four or more individuals who reported to the respective deans held distinct positions within the organization's hierarchy; only deans whose subordinates consisted of department chairmen (as opposed to committee chairmen) were chosen. Of the 20 deans who seemingly satisfied these criteria, 15 from three different branches participated in the study. The range of these leaders' affiliations with Organization B was 3 to 26 years.

**Variables**

An independent variable in this study was leader behavior. It was analyzed in terms of 12 factors, as measured by the LBDQ-XII (Stogdill, 1963). These factors included: representation, reconciliation, tolerance for uncertainty, persuasion, structure, tolerance for freedom, role assumption, consideration, production emphasis, predictive accuracy, integration, and superior orientation. Stogdill (1963) found these variables to be relatively independent indices of leader behavior.

These 12 independent variables were analyzed in two ways: as average scores and as differences in scores across the 12 factors. The use of average scores (means)
constituted the usual way of measuring leader behavior, using the LRDQ-XII. The leader's behavior was understood to be the mean of his role senders' scores on each of the 12 factors. The second manner in which leader behavior was measured used the differences among the respondents' scores on the 12 factors. The researcher defined differences in the respondents' scores as a measure of the perceived flexibility of the leader's behavior. This procedure was recommended by Fleishman (Fleishman & Hunt, 1973) as a more accurate measure of a leader's behavior over different situations.

Another independent variable utilized in this study was type of organization. Two types of organizations were examined: industrial and educational. The inclusion of type of organization as a variable yielded information about the relationship between the type of organization and the dependent variable.

The dependent variable investigated in this study was role conflict. Role conflict was chosen as the dependent variable because of the lack of research relating it to leader behavior; the research on role conflict which was available found that, not only is role conflict a potential hazard in most organizations, but also that middle-level managers or leaders are most susceptible to its effects (Gibb, 1966). Role conflict was chosen
as the dependent variable to ascertain its relationship with leader behavior.

Instruments

Two instruments were utilized in this study. The Leader Behavior Description Questionnaire - Form XII (LBDQ-XII) was formulated by Stogdill (1963) and was used to measure leader behavior. The Job-Related Tension Index (JRTI) was formulated by Kahn and his associates (1964) and was used to measure role conflict.

The LBDQ-XII measures role senders' perceptions of leader behavior in terms of 12 factors. The instrument contains 100 items, each corresponding to one of the 12 factors, and to which each respondent answers on a 1-to-5 scale (See Appendix A). Each respondent's scores are then summed across factors, yielding 12 scores for each leader. The instrument has been experimentally validated (Stogdill, 1969), and the reliability of the subscales, using a modified Kuder-Richardson formula, ranges from .55 (Factor-Representation for a sample of Ministers) to .91 (Factor-Predictive Accuracy for a sample of Air Craft Executives) (Stogdill, 1963). Although Schriesheim and Kerr (1974) reported that the LBDQ-XII requires additional construct and discriminant validation, "it
apparently does not suffer from the more serious shortcomings which plague the other versions of the questionnaire" (p. 764). The LBDQ-XII remains one of the strongest instruments now available for use in leadership research.

The Job-Related Tension Index was formulated by Kahn and his associates (1964) for use in their research on role conflict in organizations. In order to test the reliability of the Index and other measures used in their 53 case studies, the formulatores conducted a national survey of 725 persons, representing that portion of the labor force of the United States employed during the Spring, 1961. The instrument contains 15 items, to which the leader responds on a 5-point scale (See Appendix 3). The leader's overall tension score equals his total score summed over the 15 items. These items have been used in other studies conducted by the Survey Research Center, University of Michigan. No data were available on the reliability and validity of the instrument.

Procedure

Collection of Data

Letters (See Appendix C) explaining the nature of the study and requesting an interview were sent to the deans in Organization 9 who satisfied the criteria for selection as subjects in the study. This was followed
by a telephone call to each dean. Of the 20 deans contacted, two no longer held the position of dean, one was out of the country, and two were actually considered at the second level of the administrative hierarchy.

During the interview, the researcher explained to the leaders that one part of the study involved asking department chairmen to complete the LRDQ-XII. The leaders were then shown a copy of the questionnaire and a memo (See Appendix D) from the researcher to the department chairmen. All of the deans gave their permission for the researcher to send the questionnaire to the chairmen. A list of all department chairmen in the respective schools was obtained from each leader. The researcher randomly chose eight role senders (chairmen), if the department chairmen numbered more than 10, or all role senders, if the department chairmen numbered less than 10, to receive the questionnaire. This assured the return of at least four of the questionnaires for each leader.

The second part of the meeting entailed asking each dean both the frequency and intensity of his experienced role conflict, based on the items of the Job-Related Tension Index. In order to create an informal atmosphere the interview format was used allowing the dean to expand on any item. Each interview lasted approximately 30 minutes. The questionnaires were then placed in the campus mail to
the role senders, along with a self-addressed, stamped envelope.

The same procedure was followed for Organization A. Initial contact was made with each leader by the organization's industrial psychologist and was followed by a telephone call from the researcher. Role senders for each leader in Organization A were not randomly selected, however, since the Executive Vice President requested the names of all those involved in the study prior to his granting permission. The role senders for the leaders from Organization A included all individuals who reported directly to the leader in question. All eight leaders who satisfied the criteria for selection from Organization A agreed to participate in the study.

All participants in the study were guaranteed that their responses would remain anonymous. Several leaders requested a profile of the results of the role senders' responses on the questionnaire. Permission was secured from the role senders to release this information, yet their responses remained anonymous. Eighty-six percent of the role senders returned completed questionnaires to the researcher.

Scoring

The respondents' questionnaires were scored using the procedure recommended by Stogdill (1963), and the
means and difference scores for each factor for each leader were then computed. The use of the means on each subscale provided the usual measure of leader behavior. This procedure, however, did not yield any information regarding the leader's flexibility over situations. An average measure of the leader's behavior, as perceived by subordinates, was obtained. Difference scores on each subscale were included in order to obtain a measure of the leader's perceived behavior with each of his subordinates. The rationale for the utilization of difference scores was developed by Osgood and Suci (1952) for use in semantic measurements and other areas of social science. Difference scores, as measures of relationship, "take into account the absolute discrepancy between sets of measurements as well as their similarities" (Osgood & Suci, 1952, p. 254). Osgood and Suci have recommended this procedure to determine relations among the scales of judgment or among the subjects who do the judging.

Difference scores for each leader on each factor were found by randomly selecting three role senders' responses on each of the 12 variables for each leader. The cumulative differences among role senders for any one factor for each leader were then found. This procedure

\[ D_{\text{Factor}} = \sqrt{\left(\text{Score}_{RS_2} - \text{Score}_{RS_1}\right)^2 + \left(\text{Score}_{RS_3} - \text{Score}_{RS_2}\right)^2} \]
was repeated for each factor for each leader. Twenty-three difference scores, which equalled the number of leaders in the study, were obtained. A large difference score was interpreted to mean that the leader was perceived to behave in a different manner with each role sender. There is, at present, no research available using this procedure.

The Job-Related Tension Index was also scored according to the procedure recommended by Kahn and his associates (1964). This resulted in a tension frequency index. A large tension frequency index was interpreted to mean that the leader frequently is bothered by role conflict; a small tension frequency index was interpreted to mean that the leader is rarely bothered by role conflict.

Analysis

The statistical analysis used in this study was carried out in several steps. First, the factor means of the LRDQ-XII for each leader from both organizations were computed, and a stepwise multiple regression program, using the Statistical Package for the Social Sciences (SPSS) program, was run on the Harris Cope 1225 computer.

The purpose of multiple regression is to "produce a linear combination of independent variables which
correlate as highly as possible with the dependent variable" (Nie, Bent, & Hull, 1970). The resulting equation is then used to predict values of the dependent variable. One form of multiple regression is the stepwise procedure. Stepwise multiple regression results in the best set of prediction equations, using different combinations of the independent variables, one combination at a time.

One asset of the SPSS stepwise multiple regression program is its printout of the means and standard deviations and an intercorrelation matrix for each variable in the study. The means and standard deviations, an intercorrelation matrix of the independent variables and the dependent variable, and 13 multiple regression equations and multiple correlation coefficients were then computed. The difference scores among responses on the L^PDQ-XII for each factor for each leader were then computed and, again, the stepwise multiple regression program was run.

These procedures yielded data regarding the combination of type of organization and leader behavior variables which related most strongly to role conflict. Multiple correlation coefficients ($R$) and coefficients of determination ($R^2$) were computed at each step of the
procedure. The coefficient of determination associated with the last significant step of the procedure was corrected for shrinkage, using the Kerlinger and Pedhazur (1973) formula. The calculation of $R^2$ was included since the ratio of independent variables to subjects in this study was large. The zero-order correlations obtained from the multiple regression procedure were treated as if they were "error-free" (Kerlinger & Pedhazur, 1973, p. 282). This, however, is never the case. The obtained $R$ values, therefore, were over-estimated true values. Information was also obtained regarding the relationship between type of organization, differences in perceptions of leader behavior and role conflict. The .05 level of significance was chosen.

Summary

This chapter included a discussion of the research design and methodology used in this study. A description of the subjects from both the industrial and educational organizations was given. The variables and the instruments used in the study were also discussed. The

$$4R^2 = 1 - \left(1 - R^2\right)\left(\frac{N-1}{N-R-1}\right)$$
chapter was concluded with a discussion of the statistical analysis procedure, stepwise multiple regression, which was utilized in the study.
CHAPTER IV
RESULTS OF DATA ANALYSIS

This chapter will summarize the results obtained from the statistical analyses of the data. The data were analyzed in two ways. The first analysis was performed on the mean scores on each factor of the LBDQ-XII; these means are reported in Appendix E. The second analysis was performed on the difference scores on each factor of the LBDQ-XII; these difference scores are reported in Appendix F. The difference scores were defined in Chapter III.

Results of Analysis Using Mean Scores

The data were analyzed in several steps. First, the means were computed for each leader for each of the 12 factors of leader behavior, as measured by the LBDQ-XII. Appendix E presents these data with the type of organization of the leader. A stepwise multiple regression, using the means of each role set's responses and type of organization (1=Organization A, 0=Organization B) as input, was computed. The means and standard deviations of the factor scores and role conflict scores are reported in Table 1. An intercorrelation matrix is reported in
Table 2 and shows the relationship among the leader behavior variables, type of organization, and role conflict scores.
TABLE 1
Means and Standard Deviations of LBDQ-XII Factor Mean Scores and
Role Conflict Scores for Each Organization

<table>
<thead>
<tr>
<th>Leader Behavior Factor Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>REP</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>Org. A</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>St. Dev.</td>
</tr>
<tr>
<td>Org. B</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>St. Dev.</td>
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<td>Total</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>St. Dev.</td>
</tr>
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### TABLE 2

Intercorrelation Matrix of LBDQ-XII Mean and Role Conflict Scores

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<th>REC</th>
<th>TUN</th>
<th>PER</th>
<th>STR</th>
<th>TFR</th>
<th>ROL</th>
<th>CON</th>
<th>PRO</th>
<th>PAC</th>
<th>INT</th>
<th>COR</th>
<th>ORG</th>
<th>RC</th>
</tr>
</thead>
<tbody>
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<td>.12</td>
<td>.38</td>
<td>.49*</td>
<td>.24</td>
<td>.36</td>
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<tr>
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<td>.60*</td>
<td>.87*</td>
<td>.72*</td>
<td>.69*</td>
<td>.88*</td>
<td>.73*</td>
<td>-.14</td>
<td>.90*</td>
<td>.35</td>
<td>.58*</td>
<td>.50*</td>
<td>.58*</td>
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<td></td>
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<td>.35</td>
<td>.58*</td>
<td>.87*</td>
<td>.55*</td>
<td>-.35</td>
<td>.84*</td>
<td>.14</td>
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<td>.81*</td>
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<td>.65*</td>
<td>.06</td>
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<td>.45*</td>
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<td>.74*</td>
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<td>.51*</td>
<td>.51*</td>
<td>.68*</td>
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<td></td>
<td></td>
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<td>.83*</td>
<td>.14</td>
<td>.73*</td>
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<td>.40*</td>
<td>.56*</td>
<td>.74*</td>
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<td>-.07</td>
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<td>.14</td>
<td>.14</td>
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<tr>
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<td></td>
<td></td>
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<td>.73*</td>
<td>-.09</td>
<td>-.01</td>
<td>-.06</td>
<td>-.09</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
<td>.86*</td>
<td>-.09</td>
<td>-.01</td>
<td>-.06</td>
<td>-.09</td>
</tr>
<tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>1.0</td>
<td>.84*</td>
<td>-.09</td>
<td>-.06</td>
<td>-.09</td>
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<td></td>
<td></td>
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<td></td>
<td>1.0</td>
<td>.84*</td>
<td>-.09</td>
<td>-.06</td>
</tr>
<tr>
<td>SOR</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
<td>.63*</td>
<td>.63*</td>
</tr>
<tr>
<td>ORG</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>RC</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
</tr>
</tbody>
</table>
An examination of the intercorrelation matrix, using the mean factors scores, type of organization, and mean role conflict scores, indicated that there were significant intercorrelations between many of the LBDQ-XII factor scores. The only variable showing a significant correlation with role conflict was type of organization. None of the LBDQ-XII factors correlated significantly with role conflict. The negative correlation ($r = -0.43$) between type of organization and role conflict described a significant difference in perceived role conflict in the two organizations. A significant $t$ value, $t(21) = 2.28$, $p < .025$, indicated that role conflict was reported to be more intense in the educational organization than in the industrial organization.

Of the 13 independent variables (12 leader behavior variables and type of organization) used in this study, type of organization showed the highest correlation with role conflict and entered the regression equation on step one (See Table 3).
**TABLE 3**

Significant Results of Multiple Regression Procedure Using Mean Scores

<table>
<thead>
<tr>
<th>Step One</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>$b^1$</td>
</tr>
<tr>
<td>$B^2$</td>
</tr>
<tr>
<td>St. Er. $B$</td>
</tr>
<tr>
<td>$F$</td>
</tr>
<tr>
<td>$R$</td>
</tr>
<tr>
<td>$R^2$</td>
</tr>
<tr>
<td>St. Er. $R^2$</td>
</tr>
<tr>
<td>Partial $F$</td>
</tr>
<tr>
<td>Regression Equation</td>
</tr>
</tbody>
</table>

$^1b$ = Partial regression coefficient

$^2B$ = Standardized partial regression coefficient

*p < .05
An analysis of the variance of role conflict on type of organization indicated a significant relationship, \( F(1.21) = 4.69, p < .05 \). This relationship probably would not have occurred by chance within the limitations of alpha error. The magnitude of this relationship, as indicated by the correlation coefficient (\( r \)), was .43; 18% of the variance of the role conflict scores was explained by type of organization. The coefficient of determination, \( R^2 \) (Kerlinger & Pedhazur, 1973), when corrected to account for the shrinkage due to the small number of leaders and large number of independent variables, equalled .145. Tolerance of uncertainty, whose correlation with role conflict was .21, entered the regression equation on step two. There was an increment of 5% in \( R^2 \) as a result of including tolerance of uncertainty. The resulting equation, expressing the regression of role conflict on both type of organization and tolerance of uncertainty, was not significant. This relationship may have occurred by chance. Type of organization, therefore, correlated most strongly with role conflict, using the means of each leader's respondents' scores on the LBDQ-XII. The regression of role conflict on all independent variables, including those which did not add significantly to the explained variance of role conflict, are found in Table 4.
TABLE 4
Results of Multiple Regression Procedure
Using Mean LBDQ-XII Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>R</th>
<th>$R^2$</th>
<th>$R^2$ chg.</th>
<th>$b^1$</th>
<th>$b^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORG</td>
<td>.427</td>
<td>.183</td>
<td>.183</td>
<td>3.43</td>
<td>.21</td>
</tr>
<tr>
<td>TUN</td>
<td>.481</td>
<td>.232</td>
<td>.049</td>
<td>1.31</td>
<td>.71</td>
</tr>
<tr>
<td>REC</td>
<td>.517</td>
<td>.267</td>
<td>.035</td>
<td>-5.15</td>
<td>-1.51</td>
</tr>
<tr>
<td>PER</td>
<td>.541</td>
<td>.292</td>
<td>.025</td>
<td>1.17</td>
<td>.50</td>
</tr>
<tr>
<td>TFR</td>
<td>.551</td>
<td>.304</td>
<td>.012</td>
<td>-1.12</td>
<td>-.48</td>
</tr>
<tr>
<td>PAC</td>
<td>.565</td>
<td>.319</td>
<td>.015</td>
<td>3.21</td>
<td>.77</td>
</tr>
<tr>
<td>REP</td>
<td>.584</td>
<td>.341</td>
<td>.022</td>
<td>1.18</td>
<td>.21</td>
</tr>
<tr>
<td>SOR</td>
<td>.606</td>
<td>.367</td>
<td>.026</td>
<td>-0.88</td>
<td>-.50</td>
</tr>
<tr>
<td>CON</td>
<td>.625</td>
<td>.391</td>
<td>.024</td>
<td>.51</td>
<td>.30</td>
</tr>
<tr>
<td>STR</td>
<td>.633</td>
<td>.400</td>
<td>.009</td>
<td>.74</td>
<td>.26</td>
</tr>
<tr>
<td>ROL</td>
<td>.633</td>
<td>.401</td>
<td>.001</td>
<td>-.34</td>
<td>-.15</td>
</tr>
</tbody>
</table>

(Constant) 8.30

F-level or tolerance level insufficient for further computation

$1_b$ - partial regression coefficient

$2_3$ - standardized partial regression coefficient
Results of Analysis Using Difference Scores

The second part of the data analysis consisted of an examination of the LBDQ-XII difference scores, which represented the differences in perceived leader behavior for each leader, type of organization, and role conflict scores. The stepwise multiple regression procedure was also used. This analysis yielded the best combination of difference scores which related to role conflict, as well as an indication of the magnitude of the relationship between role conflict and the independent variables.

The means and standard deviations of the difference scores of the LBDQ-XII factors are reported in Table 5. The intercorrelation matrix of all variables in the study are reported in Table 6. An examination of the intercorrelation matrix indicated significant intercorrelations between some of the LBDQ-XII factor difference scores. Type of organization and reconciliation showed a moderate but significant relationship with role conflict. The moderate positive relationship ($r = .43$) between type of organization and role conflict described a significant difference in perceived role conflict in the two organizations; role conflict was perceived more intensely in the educational organization than in the industrial organization, $t (21) = 2.28$, $p < .025$. The significant positive relationship ($r = .40$) between reconciliation and
role conflict was understood to mean that large differences in subordinates' perceptions of the leader's reconciliation behavior were associated with higher levels of role conflict.

Since type of organization correlated most strongly with role conflict, it entered the regression equation on step one. This yielded a significant regression of role conflict on type of organization, $F(1,21) = 4.69, p < .05$ (See Table 7). The relationship between type of organization and role conflict, using the difference scores, probably did not occur by chance within the limits of alpha error. The magnitude of this relationship ($R$) was .43. Eighteen percent of the variance of role conflict was explained by type of organization.
| Leader Behavior Factor Scores | REP | REC | TUN | PER | STR | TFR | ROL | CON | PRO | PAC | INT | SOR | RC |
|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| **Org. A**                   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Mean                         | 6.38| 5.25| 8.38| 14.63| 11.13| 9.63| 11.75| 13.88| 14.0| 5.38| 10.25| 11.0| 32.0|    |
| St. Dev.                     | 2.6 | 2.9 | 6.4 | 10.1 | 6.8 | 8.5 | 7.2 | 12.3 | 6.3 | 3.9 | 5.7 | 4.5 | 9.5 |    |
| **Org. B**                   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Mean                         | 7.00| 6.80| 12.67| 13.27| 11.73| 16.27| 11.73| 13.27| 8.47| 6.53| 6.8 | 11.53| 39.4|    |
| St. Dev.                     | 3.5 | 3.6 | 9.1 | 11.4 | 12.2| 15.6 | 7.7 | 11.4 | 5.3 | 4.9 | 7.1 | 6.3 | 6.3 |    |
| **Total**                    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Mean                         | 6.8 | 6.0 | 11.2 | 13.7 | 11.9| 13.9 | 11.7 | 13.5 | 10.4| 6.1 | 8.0 | 11.3 | 36.7|    |
| St. Dev.                     | 3.2 | 3.3 | 7.8 | 11.0 | 9.9 | 13.2 | 7.4 | 11.9 | 5.7 | 4.8 | 6.4 | 5.5 | 7.9 |    |
TABLE 6

Intercorrelation Matrix of LBDQ-XII Difference and Role Conflict Scores

<table>
<thead>
<tr>
<th>Leader Behavior Factor Scores</th>
<th>REP</th>
<th>REC</th>
<th>TUN</th>
<th>PER</th>
<th>STR</th>
<th>TFR</th>
<th>ROL</th>
<th>CON</th>
<th>PRO</th>
<th>PAC</th>
<th>INT</th>
<th>SOR</th>
<th>ORG</th>
<th>RC</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
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<td></td>
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<tr>
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<tr>
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<td>0.34</td>
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<td>0.55*</td>
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<td>0.70</td>
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<td>0.71*</td>
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<td>0.54*</td>
<td>0.17</td>
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<td>0.53*</td>
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<td>0.06</td>
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<td>-0.00</td>
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<td>RC</td>
<td>-0.08</td>
<td>0.40*</td>
<td>0.06</td>
<td>-0.18</td>
<td>-0.06</td>
<td>0.21</td>
<td>-0.23</td>
<td>-1.0</td>
<td>-0.37</td>
<td>-0.01</td>
<td>-0.12</td>
<td>-0.28</td>
<td>0.43*</td>
<td>1.0</td>
</tr>
</tbody>
</table>

*p < .05
### TABLE 7
**Significant Results of Multiple Regression Procedure Using Difference Scores**

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>$b^1$</th>
<th>$b^2$</th>
<th>St. Er. B</th>
<th>F</th>
<th>R</th>
<th>$R^2$</th>
<th>St. Er. $R^2$</th>
<th>Partial F</th>
<th>Regression Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ORG</td>
<td>6.94</td>
<td>.427</td>
<td></td>
<td></td>
<td></td>
<td>4.69*</td>
<td>.43</td>
<td>.18</td>
<td>7.32</td>
</tr>
<tr>
<td>2</td>
<td>ORG</td>
<td>5.96</td>
<td>.37</td>
<td></td>
<td>3.11</td>
<td></td>
<td>4.14*</td>
<td>.54</td>
<td>.29</td>
<td>6.98</td>
</tr>
<tr>
<td></td>
<td>REC</td>
<td>.81</td>
<td>.34</td>
<td></td>
<td></td>
<td></td>
<td>.46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>ORG</td>
<td>5.99</td>
<td>.37</td>
<td></td>
<td>2.82</td>
<td></td>
<td>5.12*</td>
<td>.67</td>
<td>.45</td>
<td>6.33</td>
</tr>
<tr>
<td></td>
<td>REC</td>
<td>1.04</td>
<td>.43</td>
<td></td>
<td></td>
<td></td>
<td>.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SOR</td>
<td>-.58</td>
<td>-.40</td>
<td></td>
<td></td>
<td></td>
<td>.25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$^1_b$ = Partial regression coefficient
$^2_b$ = Standardized partial regression coefficient

* $p < .05$
** $p < .01$
Reconciliation was entered on the second step of the regression procedure. There was an increment of 11% in $R^2$ as a result of including reconciliation, and the resulting equation showed a significant regression of role conflict on organization and reconciliation, $F(2, 20) = 4.14, p < .05$. The $F$ ratio, $F(2, 20) = 3.11$, for the partial weight of reconciliation alone, with the effects of type of organization held constant, however, was not significant. The analysis proceeded, and, at the third step of the procedure, superior orientation was added to the equation (See Table 7). This equation indicated a significant regression of role conflict on type of organization, reconciliation, and superior orientation, $F(3, 19) = 5.117, p < .05$. This resulted in an increase of 16% in $R^2$. The negative weight of superior orientation indicated a negative relationship between the difference scores of that variable, in combination with type of organization and reconciliation, and role conflict. The magnitude ($R$) of this relationship was .67, indicating that 45% of the variance of role conflict was explained by the combination of the three independent variables. In addition, each of these three independent variables, with each of the other two held constant, contributed a significant amount to the explained variance of role conflict.
On step four, the addition of role assumption yielded a significant regression of role conflict on type of organization, reconciliation, superior orientation, and role assumption. The contribution of role assumption alone, with the effects of the other three variables held constant, was not significant.

The equation which best expressed the relationship of differences in perceived leader behavior and type of organization with role conflict was evident after the third step of the multiple regression procedure. The coefficient of determination ($R^2$) was corrected for shrinkage and became .36. The regression of role conflict on all possible independent variables, including those which did not add significantly to the explained variance of role conflict, is shown in Table 8.
### TABLE 8

Results of Multiple Regression Procedure Using LBDQ-XII Difference Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$R^2$ chg.</th>
<th>$b^1$</th>
<th>$B^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORG</td>
<td>.427</td>
<td>.183</td>
<td>.183</td>
<td>7.08</td>
<td>.444</td>
</tr>
<tr>
<td>REC</td>
<td>.541</td>
<td>.293</td>
<td>.110</td>
<td>.85</td>
<td>.36</td>
</tr>
<tr>
<td>SOR</td>
<td>.669</td>
<td>.447</td>
<td>.154</td>
<td>-.97</td>
<td>-.68</td>
</tr>
<tr>
<td>ROL</td>
<td>.706</td>
<td>.498</td>
<td>.051</td>
<td>-.24</td>
<td>-.22</td>
</tr>
<tr>
<td>INT</td>
<td>.723</td>
<td>.523</td>
<td>.025</td>
<td>.51</td>
<td>.42</td>
</tr>
<tr>
<td>PRO</td>
<td>.746</td>
<td>.557</td>
<td>.033</td>
<td>-.21</td>
<td>-.15</td>
</tr>
<tr>
<td>REP</td>
<td>.759</td>
<td>.577</td>
<td>.020</td>
<td>-.27</td>
<td>-.11</td>
</tr>
<tr>
<td>STR</td>
<td>.768</td>
<td>.590</td>
<td>.014</td>
<td>.16</td>
<td>.20</td>
</tr>
<tr>
<td>PAC</td>
<td>.772</td>
<td>.596</td>
<td>.006</td>
<td>-.27</td>
<td>-.16</td>
</tr>
<tr>
<td>TPR</td>
<td>.775</td>
<td>.601</td>
<td>.005</td>
<td>.15</td>
<td>.24</td>
</tr>
<tr>
<td>TUN</td>
<td>.782</td>
<td>.612</td>
<td>.011</td>
<td>-.16</td>
<td>-.16</td>
</tr>
<tr>
<td>CON</td>
<td>.783</td>
<td>.614</td>
<td>.002</td>
<td>-.11</td>
<td>-.16</td>
</tr>
<tr>
<td>PER</td>
<td>.785</td>
<td>.617</td>
<td>.003</td>
<td>.07</td>
<td>.10</td>
</tr>
</tbody>
</table>

(Constant) 33.42

$^1_b$ - partial regression coefficient

$^2_B$ - standardized partial regression coefficient
Summary

This chapter reported the results of the statistical analyses of the data using the multiple regression procedure. The statistical analyses were conducted in two parts. In the first part of the analysis, the mean factor scores for each leader were used; the intercorrelation matrix for all the variables and the regression equations were examined. In the second part of the analysis, the difference scores on each factor for each leader were used; this intercorrelation matrix for all the variables and the regression equations were examined. Each part of the analysis yielded slightly different results.

When the mean factor scores were used, it was found that type of organization was the only independent variable which correlated significantly with role conflict; type of organization was the only variable which yielded a significant regression equation. None of the leader behavior variables were correlated significantly with role conflict, nor added significantly to the regression equation. Type of organization, however, explained only 15% of the variance of role conflict.

When the difference scores were used, it was found that type of organization and reconciliation were correlated significantly with role conflict. Type of organization,
reconciliation, and superior orientation, in combination, yielded a significant regression equation. No other variables were correlated significantly with the dependent variable, nor significantly added to the regression equation. Together, the variables of type of organization, reconciliation, and superior orientation accounted for 36% of the variance of role conflict. The use of the difference scores for this sample strengthened the relationship of the independent variables with the dependent variable.
CHAPTER V
SUMMARY AND CONCLUSIONS

Summary
This study investigated the relationship between perceived leader behavior, type of organization, and the leader's perceptions of role conflict. The independent variables under investigation were the 12 factors of leader behavior, as measured by the L3DQ-XII instrument (Stogdill, 1963) and type of organization. The dependent variable was perceived role conflict, as measured by the Job-Related Tension Index (Kahn et al., 1964). The sample consisted of 8 leaders from an industrial organization and 15 leaders from an educational organization. Each of these leaders completed the Job-Related Tension Index. The scores on the L3DQ-XII were obtained from the responses of 130 subordinates (role senders).

Leader behavior was analyzed in two ways. The first analysis used the mean factor scores on the L3DQ-XII for each leader. This procedure is the usual method of measuring leader behavior using the L3DQ-XII. The second way in which leader behavior was measured used the difference scores, or the differences among role senders'
perceptions of the leader's behavior, on each factor. This procedure was suggested by Fleishman (Fleishman & Hunt, 1973) in order to account for the leader's flexibility in different situations. Each set of data was analyzed using the SPSS Multiple Regression program.

The results of the data analyses indicated that, for both sets of measures of leader behavior, type of organization correlated significantly with role conflict. None of the leader behavior variables, when construed as mean factor scores, significantly added to the relationship with role conflict. Two leader behavior variables (reconciliation and superior orientation), when construed as difference scores on each factor, significantly strengthened the relationship of the independent variables with role conflict.

Discussion

Several conclusions can be drawn from the results of the data analyses. An examination of the mean role conflict scores in each organization, and the resulting t value, indicated that role conflict was perceived to be more intense in the educational organization than in the industrial organization. It seemed that educational leaders were bothered more intensely by the differing
expectations held by the members of their role sets than were the industrial leaders. The reasons for this could be many. It may be that the industrial leader tends to have his role more sharply defined by the organization; role senders' expectations about the leader's behavior, therefore, may vary only within the parameters of the expectations held by the organization. The role of the educational leader, however, is often defined in terms of his expertise in a particular area. The organization itself may define the leader's role more loosely, thereby allowing him more freedom in defining his own role; this would mean that role senders have more latitude in defining their expectations of the leader's behavior. Role senders would then be more likely to hold differing and often contradictory expectations about the leader's behavior. This is often the basis of perceived role conflict.

Another explanation for the fact that role conflict was perceived more intensely in the educational organization than in the industrial organization may be found in an examination of the goals of each type of organization. The goals of educational organizations include effective citizenship, development of ethical character, and the promotion of good health (Brubaker & Nelson, 1974, p. 66). These goals are not discretely measurable, nor are the operations
associated with them easily broken into routine tasks; hierarchical relationships are not established easily. The goals of industrial organizations, however, are less abstract. An industry's success is often determined by its levels of production and sales which can be discretely measured. Production and sales operations can be broken into fairly routine tasks, and hierarchical relationships can be established easily. When the overall responsibility of the organization cannot be subdivided into fairly specialized tasks, as in the educational organization, "the judgments of professionals rather than the routine compliance with the commands of superiors" must govern the operations of the organization (Blau & Scott, 1962, pp. 206-210).

The educational leader, therefore, is likely to be responsible for individuals who are considered professionals. These are the faculty members. In addition, the educational leader (dean) usually holds faculty rank and is considered to be a faculty member himself. No clear hierarchical relationships are formed, and the role of the educational leader tends to be ambiguous. This provides a reasonable explanation for greater perceived role conflict in the educational organization than in the industrial organization.

An examination of the intercorrelation matrix for mean factor scores indicated that many of the LBDQ-XII factors were intercorrelated. The intercorrelation matrix for the difference scores showed, with a few exceptions, that
many of the same factors were intercorrelated. Notable exceptions were reconciliation and superior orientation. When the difference scores were used, these variables showed fewer intercorrelations with other LBDQ-XII factors than when the mean scores were used. This provides a partial explanation for why these two variables entered the regression equation of role conflict on the difference scores but not on the mean scores. Kerlinger and Pedhazur (1973) have explained that the larger the correlation between two independent variables, the less effective is the addition of the second variable to the regression. It is reasonable, therefore, that the combination of reconciliation and superior orientation, due to their lower number of intercorrelations with other LBDQ-XII factor difference scores, explained more variance of role conflict than when mean factor scores were used.

When step one of the regression was examined, it was evident that type of organization had a negative relationship with role conflict (and hence, a negative regression weight) when mean scores were used, but a positive relationship with role conflict when the difference scores were used. This was due to the fact that the industrial and educational organizations were assigned values of 1 and 0, respectively, when the mean scores were used, and values of 1 and 2, respectively, when the difference scores were used. There were, therefore, no differences in the actual correlations
and regressions of type of organization and role conflict for each analysis.

The regression equation which resulted when the LBDQ-XII factor mean scores were used indicated that average perceived leader behavior showed no significant relationship to role conflict. It was concluded that, for this sample, the usual method of measuring perceived leader behavior, using the LBDQ-XII instrument, added little information about the relationship of type of organization and role conflict.

The regression equation which resulted when the LBDQ XII factor difference scores were used did provide information about the relationship between the set of independent variables and the dependent variable. Type of organization showed the strongest relationship with role conflict; an examination of the difference between the mean role conflict score for each organization indicated that the leaders in the educational organization perceived role conflict to be more intense than the industrial leaders.

The first LBDQ-XII difference factor, which related positively to role conflict, was reconciliation; this indicated that the greater the discrepancy among the role senders' perceptions of the leader's reconciliation behavior, the greater was the likelihood that the leader perceived role conflict. Since reconciliation was defined as the behavior directed toward reconciling conflicting demands and reducing disorder within
the situation, it is reasonable to expect that this relationship would be positive. If some role senders' perceive that the leader reconciles conflicting demands, whereas others perceive that he does not, the subordinates' expectations resulting from their perceptions are likely to be different; this is often the basis of perceived role conflict.

The second and last LBDQ-XII difference factor, which significantly added to the relationship of type of organization and reconciliation to role conflict, was superior orientation. The addition of this factor, however, resulted in a negative relationship between role conflict and superior orientation in combination with type of organization and reconciliation. This relationship indicated that larger differences among subordinates' perceptions of the leader's relations and influence with his superiors, in combination with little difference among the subordinates' perceptions of the leader's reconciliation behavior, related to lower levels of the leader's perceived role conflict. The negative correlation between superior orientation and role conflict may indicate that the leader has satisfied the demands of his role senders. He is perceived to behave as if he were striving for higher status and influence with those role senders who demand that behavior of him; he is perceived to behave as if he were not striving for higher status and influence with those role senders who do not expect superior-oriented behavior of him. As a result, the leader perceives little role conflict.
It was interesting to note the difference in the amount of the variance which was explained at the last significant steps of each regression procedure. When the LBDQ-XII factor mean scores were used, type of organization explained 15% of the variance of role conflict; when the LBDQ-XII factor difference scores were used, the combination of type of organization, reconciliation, and superior orientation explained 36% of the variance of role conflict. As Kerlinger and Pedhazur (1973) have recommended, it is important to test the meaningfulness of this increment in $R^2$. In both cases, the subordinates completed the LBDQ-XII instruments, and these instruments were scored; the factor mean scores and the factor difference scores were obtained from the same instrument, and each set of scores became the input for each regression procedure. No additional information was needed to obtain $R^2$, using the LBDQ-XII factor difference scores. It was concluded, therefore, that the increment in $R^2$, which resulted from the use of the LBDQ-XII factor difference scores, was a meaningful one.

A significant aspect of this study was the conceptualization and measurement of flexibility in leadership behavior through the use of the LBDQ-XII factor difference scores. Although this method of measurement needs to be
validated, it represents an attempt to operationalize situational leadership. Much of the research (Blanchard & Hershey, 1972; Fiedler, 1960, 1965, 1967; Korten, 1962; Tannenbaum & Schmidt, 1958; Vroom, 1964) in the area of leadership supports the idea that, if the leader or manager is to be effective in his role, he should exercise different behaviors in different situations. Many researchers, however, have continued to measure leadership as if it were a stable characteristic. Fleishman (Fleishman & Hunt, 1973) recommended an alternative procedure by which the variability in subordinates' responses on the factors of the LBDQ-XII would be examined. This study represented an attempt to utilize Fleishman's recommendation.

A second significant aspect of this study was its attempt to delineate which leader behavior factors were related to the criterion variance. Kerr and Schriesheim (1974) concluded that much of the research on leader behavior fails to confront this question. This study, albeit limited by the size of the sample, attempted to answer this question.

Another important aspect of this study was the indication that there was a relationship between type of organization and role conflict. Much of the previous research in the area of role conflict has been conducted
in non-educational organizations; a conclusion from this study, however, is that role conflict is present in educational organizations as well.

**Suggestions for Future Research**

Because the size of the sample \( (N = 23) \) in this study was small, it is recommended that this study be replicated using a large sample of leaders. This will yield a more stable multiple correlation coefficient \( (R) \) and coefficient of determination \( (R^2) \), since the ratio of the number of independent variables to the size of the sample would be smaller (Kerlinger & Pedhazur, 1973).

The generalizability of this study's conclusions is limited to the specific organizations from which the subjects were chosen. This is due to the fact that the organizations were not randomly selected; therefore, it is recommended that the replication include several different educational and industrial organizations, randomly selected, if possible, in different geographical areas. It would then be possible to generalize those results beyond the two institutions considered in this study.

Future research should also be concerned with finding different ways to measure the situational nature of a leader's behavior. The use of the LBDQ-XII factor difference scores is one possible measure of the leader's
flexibility. This method of measuring leader behavior needs to be validated, however, before it can be considered an accurate measurement of situational leadership.

A final suggestion for future studies is that researchers employ designs whereby the predictor and criterion ratings are made by different individuals. The present study employed such a design. According to Kerr and Schriesheim (1974), predictor and criterion ratings by different individuals eliminate the concern that "raters distort their perceptions so as to obtain balanced cognitions" (p. 557).

It is apparent that leadership is a complex process indeed. It is hoped that these suggestions for future research will encourage exploration into the turbid terrain of leadership behavior.
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BIBLIOGRAPHY


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APPENDIX A

LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE-FORM XII
LEADER BEHAVIOR DESCRIPTION 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 describes a specific kind 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 description of leadership. Each item should be considered as a separate description. 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 unit of organization 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 Ohio State University
Columbus, Ohio

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DIRECTIONS:

a. READ each item carefully.

b. THINK about how frequently the leader engages in the behavior described by the item.

c. DECIDE whether he (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 = Occasionally
D = Seldom
E = Never

e. MARK your answers as shown in the examples below.

Example: He often acts as described ............................................. A B C D E
Example: He never acts as described ............................................. A B C D E
Example: He occasionally acts as described ................................. A B C D E

1. He acts as the spokesman of the group........................................ A B C D E
2. He waits patiently for the results of a decision............................. A B C D E
3. He makes pep talks to stimulate the group.................................. A B C D E
4. He lets group members know what is expected of them................ A B C D E
5. He allows the members complete freedom in their work................ A B C D E
6. He is hesitant about taking initiative in the group....................... A B C D E
7. He is friendly and approachable................................................. A B C D E
8. He encourages overtime work.................................................. A B C D E
9. He makes accurate decisions.................................................... A B C D E
10. He gets along well with the people above him............................. A B C D E
11. He publicizes the activities of the group.................................... A B C D E
12. He becomes anxious when he cannot find out what is coming next... A B C D E
A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

13. His arguments are convincing .............................................. A  B  C  D  E
14. He encourages the use of uniform procedures ...................... A  B  C  D  E
15. He permits the members to use their own judgment in solving problems. A  B  C  D  E
16. He fails to take necessary action ........................................ A  B  C  D  E
17. He does little things to make it pleasant to be a member of the group... A  B  C  D  E
18. He stresses being ahead of competing groups ....................... A  B  C  D  E
19. He keeps the group working together as a team ................... A  B  C  D  E
20. He keeps the group in good standing with higher authority ......... A  B  C  D  E
21. He speaks as the representative of the group ....................... A  B  C  D  E
22. He accepts defeat in stride ............................................... A  B  C  D  E
23. He argues persuasively for his point of view ....................... A  B  C  D  E
24. He tries out his ideas in the group ..................................... A  B  C  D  E
25. He encourages initiative in the group members .................... A  B  C  D  E
26. He lets other persons take away his leadership in the group ....... A  B  C  D  E
27. He puts suggestions made by the group into operation ........... A  B  C  D  E
28. He needs members for greater effort ................................... A  B  C  D  E
29. He seems able to predict what is coming next ....................... A  B  C  D  E
30. He is working hard for a promotion .................................... A  B  C  D  E
31. He speaks for the group when visitors are present ............... A  B  C  D  E
32. He accepts delays without becoming upset ......................... A  B  C  D  E
33. He is a very persuasive talker .......................................... A  B  C  D  E
34. He makes his attitudes clear to the group ............................ A  B  C  D  E
35. He lets the members do their work the way they think best ....... A  B  C  D  E
36. He lets some members take advantage of him ...................... A  B  C  D  E
A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

37. He treats all group members as his equals
38. He keeps the work moving at a rapid pace
39. He settles conflicts when they occur in the group
40. His superiors act favorably on most of his suggestions
41. He represents the group at outside meetings
42. He becomes anxious when waiting for new developments
43. He is very skillful in an argument
44. He decides what shall be done and how it shall be done
45. He assigns a task, then lets the members handle it
46. He is the leader of the group in name only
47. He gives advance notice of changes
48. He pushes for increased production
49. Things usually turn out as he predicts
50. He enjoys the privileges of his position
51. He handles complex problems efficiently
52. He is able to tolerate postponement and uncertainty
53. He is not a very convincing talker
54. He assigns group members to particular tasks
55. He turns the members loose on a job, and lets them go to it
56. He backs down when he ought to stand firm
57. He keeps to himself
58. He asks the members to work harder
59. He is accurate in predicting the trend of events
60. He gets his superiors to act for the welfare of the group members
A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

61. He gets swamped by details ........................................... A B C D E
62. He can wait just so long, then blows up ............................ A B C D E
63. He speaks from a strong inner conviction .......................... A B C D E
64. He makes sure that his part in the group is understood by the group members ......................................................... A B C D E
65. He is reluctant to allow the members any freedom of action .......................... A B C D E
66. He lets some members have authority that he should keep ........ A B C D E
67. He looks out for the personal welfare of group members .......... A B C D E
68. He permits the members to take it easy in their work ............ A B C D E
69. He sees to it that the work of the group is coordinated .......... A B C D E
70. His word carries weight with his superiors .......................... A B C D E
71. He gets things all tangled up ........................................... A B C D E
72. He remains calm when uncertain about coming events .......... A B C D E
73. He is an inspiring talker .............................................. A B C D E
74. He schedules the work to be done .................................... A B C D E
75. He allows the group a high degree of initiative .................... A B C D E
76. He takes full charge when emergencies arise ..................... A B C D E
77. He is willing to make changes ........................................ A B C D E
78. He drives hard when there is a job to be done .................... A B C D E
79. He helps group members settle their differences ................ A B C D E
80. He gets what he asks for from his superiors ........................ A B C D E
81. He can reduce a madhouse to system and order ................... A B C D E
82. He is able to delay action until the proper time occurs .......... A B C D E
83. He persuades others that his ideas are to their advantage ....... A B C D E
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>84. He maintains definite standards of performance.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
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<tr>
<td>85. He trusts the members to exercise good judgment.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
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<td>86. He overcomes attempts made to challenge his leadership.</td>
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<td>87. He refuses to explain his actions.</td>
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<td>C</td>
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<td>88. He urges the group to beat its previous record.</td>
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<tr>
<td>89. He anticipates problems and plans for them.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
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<td>90. He is working his way to the top.</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
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<td>91. He gets confused when too many demands are made of him.</td>
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<td>B</td>
<td>C</td>
<td>D</td>
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<td>92. He worries about the outcome of any new procedure.</td>
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<td>C</td>
<td>D</td>
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<td>93. He can inspire enthusiasm for a project.</td>
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<td>B</td>
<td>C</td>
<td>D</td>
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<td>94. He asks that group members follow standard rules and regulations.</td>
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<td>95. He permits the group to set its own pace.</td>
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<td>C</td>
<td>D</td>
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<td>96. He is easily recognized as the leader of the group.</td>
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<td>B</td>
<td>C</td>
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<td>97. He acts without consulting the group.</td>
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<td>98. He keeps the group working up to capacity.</td>
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<td>B</td>
<td>C</td>
<td>D</td>
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<td>99. He maintains a closely knit group.</td>
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<td>B</td>
<td>C</td>
<td>D</td>
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<tr>
<td>100. He maintains cordial relations with superiors.</td>
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APPENDIX B

JOB-RELATED TENSION INDEX
JOB-RELATED TENSION INDEX*

All of us occasionally feel bothered by certain kinds of things in our work. I'm going to ask you about some things that sometimes bother people and I would like you to tell me how frequently you feel bothered by each of them.

1. Feeling that you have too little authority to carry out the responsibility assigned to you.
   Frequency -

2. Being unclear on just what the scope and responsibilities of your job are.
   Frequency -

3. Not knowing what opportunities for advancement or promotion exist for you.
   Frequency -

4. Feeling that you have too heavy a work load, one that you can't possibly finish during an ordinary working day.
   Frequency -

5. Thinking that you'll not be able to satisfy the conflicting demands of various people you work with.
   Frequency -

6. Feeling that you're not fully qualified to handle your job.
   Frequency -

7. Not knowing what your boss thinks of you, how he evaluates your performance.
   Frequency -

8. The fact that you can't get information needed to carry out your job.
   Frequency -
9. Having to decide things that affect the lives of individuals, people that you know.

Frequency -

10. Feeling that you may not be liked and accepted by the people you work with.

Frequency -

11. Feeling unable to influence your immediate boss's decisions and actions that affect you.

Frequency -

12. Not knowing just what the people you work with expect of you.

Frequency -

13. Feeling that your progress on the job is not what it should or could be.

Frequency -

14. Thinking that the amount of work you have to do may interfere with how well it gets done.

Frequency -

15. Feeling that you have too much responsibility and authority delegated to you by superiors.

Frequency -

*Kahn et al., 1964, pp. 424-425.*
APPENDIX C

SAMPLE LETTER TO DEANS FROM ORGANIZATION B
John J. Doe, Dean  
School of Education  
The University of North Carolina  
Greensboro, NC 27412  

Dear Dr. Doe:  

I am a doctoral candidate in Administration at The University of North Carolina at Greensboro, and I am writing to request your help with my dissertation. The topic of my paper is leadership, and you and other deans within the University have been selected as subjects in my study.

I am certain that the demands on your time are numerous. Because of this, I have tried to limit the amount of time your participation would entail. I am certain that my interview with you would take only 20 to 30 minutes.

I shall call your office next week to schedule an appointment with you during the week of December 2 or December 9 should you decide to participate in the study.

Thank you very much for your support.

Sincerely,

/s/ Sara H. Moniot
APPENDIX D

SAMPLE MEMORANDA TO ROLE SENDERS
Dear Role Sender:

I am a graduate student at the University of North Carolina at Greensboro and am doing a study on leadership in industry. The subjects in my study include some of the Vice Presidents from Organization A, and I need several of their associates' perceptions of their behavior as leaders.

Mr. Leader suggested that you might be willing to fill out the enclosed questionnaire. If you choose to complete the questionnaire, please return it to me within two weeks. Your responses are extremely important to my study, but if you feel that you cannot complete the questionnaire, kindly return it to me so that I have some idea of the number of responses I will have. Please do not sign your name; all responses will be kept anonymous.

Many thanks for your help.

Sallie Moniot
School of Education
UNC-G
MEMORANDUM TO ROLE SENDERS - ORGANIZATION B

Dear Role Sender:

I am a doctoral candidate in Administration at The University of North Carolina at Greensboro, and I am writing to request your help with my dissertation. The subjects in my study include the deans of many of the schools within Organization B, and I need several department heads' perceptions of their behavior as leaders.

Mr. Leader suggested that you might be willing to fill out the enclosed questionnaire. If you choose to complete the questionnaire, please return it to me within two weeks. Your responses are extremely important to my dissertation, but if you feel that you cannot complete the questionnaire, kindly return it to me so that I have some indication of the number of responses I will have. Please do not sign your name; all responses will be kept anonymous.

Many thanks for your help.

Sallie Moniot
School of Education
UNC-G
APPENDIX E

LBDQ-XII FACTOR MEAN SCORES FOR EACH LEADER
### LBDQ-XII Factor Mean Scores for Each Leader

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## APPENDIX E (Continued)

### LBDQ-XII Factor

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APPENDIX F

L3DQ-XII FACTOR DIFFERENCE SCORES FOR EACH LEADER
### LBDQ-XII Factor Difference Scores for Each Leader

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