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An Appraisal of the Contingency Theory of Leadership Effectiveness: A Methodological Analysis

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An Appraisal of the Contingency Theory of Leader-

ship Effectiveness: A Methodological Analysis

(TITLE)

BY

Hoi Kin Suen

B.A., Eastern Illinois University, 1976

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
Master of Arts in Sociology

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

1977

YEAR

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AN APPRAISAL OF THE CONTINGENCY
THEORY OF LEADERSHIP EFFECTIVENESS:
A Methodological Analysis

BY

HOI KIN SUEN

B.A. in Sociology, Eastern Illinois University, 1976

ABSTRACT OF A THESIS

Submitted in partial fulfillment of the
requirements for the degree of Master of Arts in
Sociology at the Graduate School of Eastern Illinois
University

Charleston, Illinois

1977

The Contingency Theory of Leadership Effectiveness is one of the most comprehensive theories of leadership today. The theory postulates that leadership effectiveness is contingent upon the combination of leadership style and situational favorableness. Leader style is measured by the Esteem for Least-Preferred Coworker (LPC) scale. A high LPC score is interpreted as reflecting a relation-oriented leader, while a low LPC score reflects a task-oriented leader. Situational favorableness is determined by three variables: leader-member relations, task structure, and position power.

Recent studies have challenged the reliability and validity of the theory. This study is a critical analysis of the methodological and conceptual structure of the theory. Leadership theories prior to the Contingency Theory are also briefly reviewed in order to understand the latter within the historical context. Data are obtained from secondary sources. Cross-references are used to validate the data.

The following are the main conclusions of the study:

- 1) A low LPC score can be more logically interpreted as reflecting a relation-oriented leader, instead of a task-oriented leader.
- 2) A high LPC score is undefined.
- 3) An alternative instrument is needed to measure leadership style. Possibly two instruments are needed - one for task-orientation, and one for relation-orientation.
- 4) Leader-member relations should be measured strictly by the sociometric method.
- 5) More research is needed to determine whether position power and task

structure are actually situational variables. If they are found to be constants, they should be excluded from the theory as variables.

6) Empirical research is needed to validate the arrangement of the three situational variables in terms of favorableness.

7) There needs to be a consensus of the criteria of effectiveness.

Overall, the author found the theory rather ambiguous and with questionable operationalizations, instrumental reliability and generalizability. Various modifications, however, can possibly refine the theory and improve its validity.

Looking at the theory from the historical perspective, the author questions whether the study of leadership today repeats the methodological path of Great Man Theory. It is quite possible that the whole history of the study of leadership is a big "semantic merry-go-round."

AN APPRAISAL OF THE CONTINGENCY THEORY OF
LEADERSHIP EFFECTIVENESS: A METHODOLOGICAL
ANALYSIS

Hoi Kin Suen

TABLE OF CONTENTS

Illustrations-----ii

Chapter I. Introduction----- 1

Chapter II. Review of Previous Theories-----15

 The Study of Leadership Traits-----15

 The Study of Leadership Style-----23

Chapter III. The Contingency Theory of Leadership Effectiveness-----35

 The Need for a Situational Theory-----35

 The Contingency Theory-----38

Chapter IV. Analysis of the Contingency Theory-----58

 External and Predictive Validity-----61

 The Least-Preferred Co-Worker Scale-----68

 The Situational Variable-----84

 The Measurement of Effectiveness-----93

 The Overall Theory-----96

Chapter V. Summary and Discussions-----101

Bibliography-----106

Appendix-----117

ILLUSTRATIONS

FIGURES:

1. The Fast Growth of Leadership Studies-----	6
2. A Comparison of the Number of Studies Showing Positive, Zero, and Negative Relationships to Organizational Effectiveness Between Democratic and Autocratic Leadership Styles-----	29
3. The Esteem for Least-Preferred Co-worker Scale-----	41
4. The Eight Octants of Situational Favorableness As a Continuum---	47
5. Correlations Between LPC Scores and Group Effectiveness-----	50
6. A Graphic Representation of Effectiveness of High LPC Leaders in Relations to Situational Favorableness-----	51
7. A Graphic Representation of Effectiveness of Low LPC Leaders in Relations to Situational Favorableness-----	51
8. Scattergrams of Case Distribution Along the Dimensions of Position Power and Task Structure-----	53
9. A Comparison of Antecedent and Evidential Correlations of the Contingency Theory of Leadership Effectiveness-----	66
10. The Modification of the LPC Items-----	69
11. Task-Orientation and Relation-Orientation As Two Dimensions of Leadership Style-----	80
12. Etzioni's Model of Leadership Power-----	80
13. Increments of Percentage Games Won by Two Hypothetical Basketball Teams-----	95

TABLES:

1. The Seventeen Personality Traits Listed By Smith (1932)-----	18
2. Traits Frequently Found in Leaders (Stogdill,1948)-----	20
3. Median Correlations Between LPC Scores and Group Effectiveness in Each Octant-----	49
4. A Comparison of Jacobs' Findings and Fiedler's Predictions-----	63
5. A Comparison of Johnson and Ryan's Findings and Fiedler's Predictions-----	65
6. Antecedent and Evidential Correlations-----	65
7. Contradictory Results Found in Each Octant-----	67
8. Test-Retest Reliabilities of the LPC Scale in Three Studies by Fox-----	71
9. Summary of Test-Retest Reliabilities Found by Various Studies---	72
10. Correlation Between LPC Scores and Leadership Style Orientations (Bass, <u>et al</u> ,1964)-----	78
11. Case Distribution Among Cctants Discovered by Heier and Utecht (1976)-----	89
12. Variables That Have Been Identified As Related to Leadership--	103

CHAPTER I

INTRODUCTION

Leadership is a phenomenon that has been studied by many. Numerous philosophers such as Confucius, Plato, Machiavelli, contributors to the Bible, and Bertrand Russell have discussed the importance of competent leadership as an element of societal harmony, as well as progress. They have all tried, in one way or another, to advise leaders of better methods to conduct social affairs. Some have discussed what good leadership does, while others felt that it reflects a society of inequality. Regardless of their positions, it has been generally accepted that leadership plays a very important role in social genesis, social maintenance, and social change.

Perhaps the most radical position was taken by Peter and Hull (1969) who felt that all societal problems can be explained in terms of incompetent leadership. Peter and Hull pointed out that incompetent leadership, generated through the process of the Peter Principle, has hindered any Utopian plans from ever becoming successful. They felt that the solution to today's problems is to change the current compulsive and ironic mode of promoting incompetent individuals into positions of leadership.

Leadership as the solution to societal problems is by no means an isolated idea accepted only within academe. It is generally accepted by

laymen as well. This is reflected by the fact that most presidential candidates in the past two decades have, in one way or another, advocated "strong leadership" as a feature of their campaign platforms. It is also not unusual to hear any one of the following sayings today in any organizations:

"Leaders summon the appropriate quality of man"
"Without good leadership nothing is possible"
"The trouble with this organization is that it lacks good leadership"

The phenomenon of leadership represents a very significant and unique implication to the entire discipline of sociology. It has a clear antecedent in the early studies of collective behavior. It was once closely related to the works of such forebearers of modern sociology as Tarde, LeBon, Ross, and Simmel. Its uniqueness lies in the fact that it indicates the reciprocity of social process. While conventional sociology studies how the group influences the individual, the study of leadership investigates how the individual influences the group.

LEADERSHIP AND SOCIAL CHANGE

In the studies of leadership, the phenomenon is most frequently related to social change. Leadership is viewed as either a direct cause, or a catalyst that stimulates and facilitates social change.

Lewin's (1951) Force Field Analysis of Social Change is perhaps the most systematic treatment of the role of leadership in social change. He viewed the social system as a highly unstable body. When various social forces pressing upon it offset one another, a temporary social stability resulted. This he called the "quasi-stationary equilibrium."

Such a social situation can be changed by applying pressure on either side of the system, resulting in social change toward a particular social goal. Lewin identified four agents that would help to increase pressure to move the system toward the social goal. These are Leadership, Participation, Temporary System, and Adaptation (Watson, 1966; 549-560).

It is indeed ironic that while leadership is viewed as an agent of social change, recent studies have discovered that leadership effectiveness is affected by social change. Bennis (1976) pointed out that the contemporary trend of specialization, professionalization, and routinization of work in the mass society has jeopardized leadership effectiveness. His analysis of leadership in multiversities led him to formulate his two sarcastic "Laws of Academic Pseudodynamics":

I) Routine Work Drives Out Non-routine Work; and II) Make Whatever Plans You Will, You May Be Sure The Unexpected And The Trivial Will Disturb And Disrupt Them.

This again seems to indicate the fact that leadership is one of the dimensions in the duality of social process.

LEADERSHIP AND ORGANIZATIONAL EFFECTIVENESS

Leadership is often viewed as the most important determinant of the success or failure of an organization. For example, the downfall of the once successful socialistic commune, New Harmony, was commonly claimed to have been caused by a one-year absence of its charismatic leader, Robert Owens (Lockwood, 1902:108).

The relationship between leadership and organizational success is,

in fact, quite uncertain. It is estimated that about half of all practicing managers expect communication and motivation to resolve organizational problems, while an equally large number of managers expect to find the solution in leadership (Nord,1972:89).

Prominent industrial sociologists and psychologists such as Hage and Aiken (1970), Drucker (1975), McGregor (1960), Townsend (1970), and Likert (1967) viewed leadership as the primary determinant of organizational performance. Drucker, in his famous Concept of the Corporation, which advocated the organizational model of General Motors as the ideal model for modern large-scale organizations, pointed out that:

As with every other institution, the survival and successful functioning of the corporation depends on the solution of three interdependent problems: the problem of leadership, the problem of basic policy, and the problem of objective criteria of conduct and decision. Of these problems, the decisive one, particularly in the corporation, is the problem of leadership (1975:35).

On the other hand, such classic literature in the study of organizational behavior as March and Simon's Handbook of Organizations (1965) did not even mention leadership as a dimension of organization. Perrow (1970) wrote:

Leadership as an answer to organizational problems is an "important prejudice;" - while leadership may be an influential variable, it is certainly not the most significant and in fact can be viewed as dependent, rather than independent (1970:3).

Regardless of the various degrees of importance given to leadership in organizations, as well as in society in general, as Riesman (1953) has pointed out, that our problems are people problems - interpersonal

relations - rather than the material conditions of life and the concrete machinery of organizations.

THE STUDIES OF LEADERSHIP

Although various philosophers in the past have elaborated on the dimensions of leadership in great detail, the scientific study of leadership was not initiated until the beginning of this century. For the past seventy years, and especially during the past forty years, psychologists, sociologists, communications specialists, and management theorists have been increasingly active in attempting to introduce the methods and knowledge of the social sciences into the study of leadership.

Since World War II, the number of leadership studies in both small group settings and in large organizations, has grown dramatically. Hare (1962) reported that between 1930 and 1939, there were an average of 21 studies per year; however, between 1940 and 1944, it had grown to 31 studies per year; between 1945-1949, 55 per year; and between 1950-1953, 152 studies per year (Fig. 1). It is also estimated that there have been well over 2,500 papers, hundreds of books, and thousands of pamphlets published in the past two decades in the area of leadership.

One reason for such a great and rapid growth in the studies of leadership is the necessity of such studies due to the ever increasing complexity of organizations. The complexity was caused by rapid post-war social change. Megginson (1963) pointed out that dynamic leadership is becoming a necessity to meet the proliferating problems now

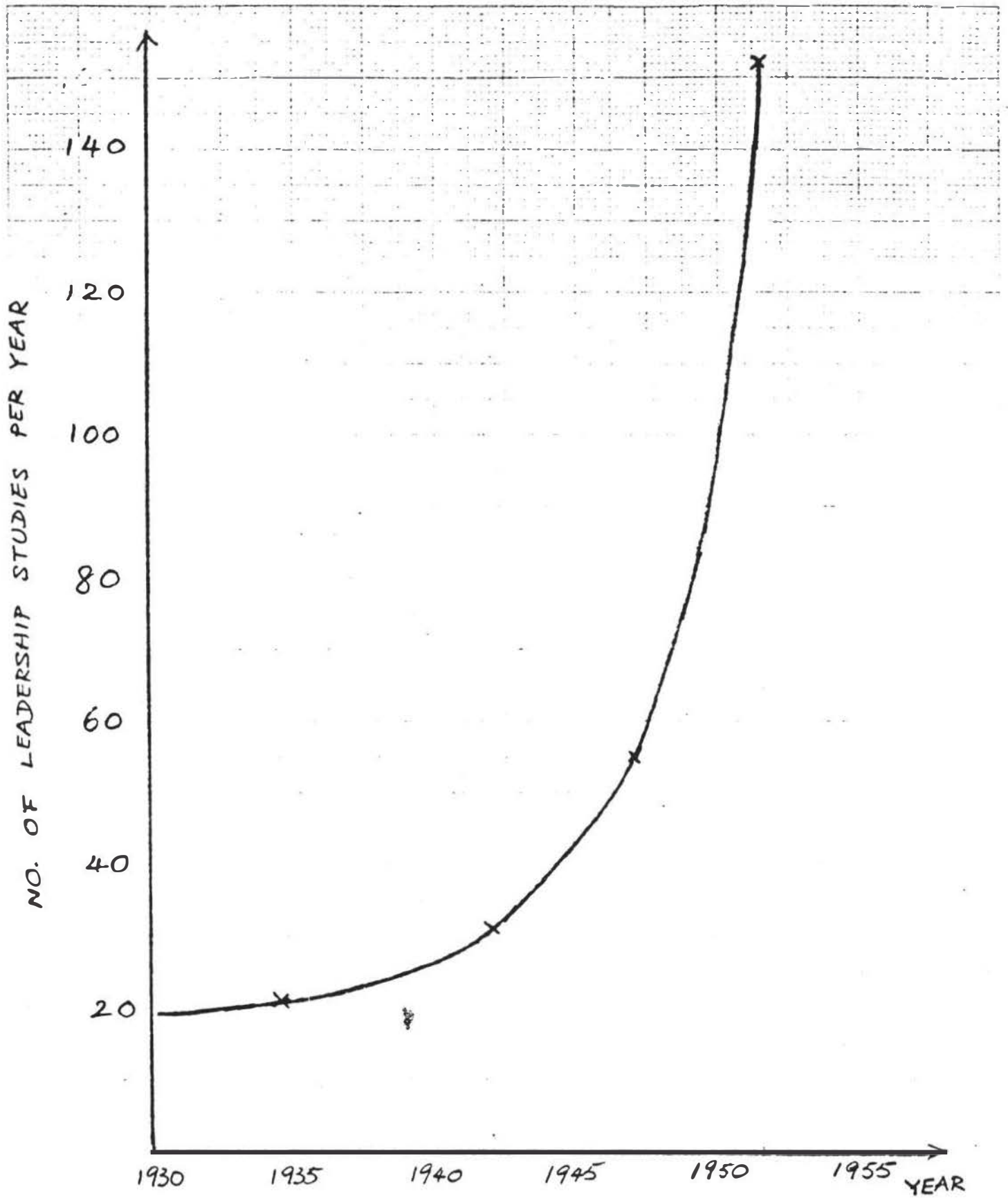


FIGURE 1. THE EXPONENTIAL GROWTH OF LEADERSHIP STUDIES

pressing upon modern organizations:

There is no reason to doubt that with continuing economic changes, including technological development and expanding international business operations; with sociological changes including dominant-minority group relations; and with political changes, including increased governmental assistance, regulations, and control.....the managerial position of the future will be far more complex and demanding. The best possible way of preparing for, and coping with, such changes is through enlightened managerial leadership (1968:9).

Another possible explanation for the popularization of the study of leadership is the realization that leadership is a highly complex phenomenon. As more standardized social science research procedures were introduced into the study of leadership, more previous assumptions were identified as myths. The fast growth of leadership studies, indeed, can be considered as indicative of the increasing anxiety of leadership theorists who had discovered that they were tangled up in a problem much more complex than they originally expected. This anxiety is evident in more recent publications. Fisher (1974) expressed his disappointment: "It is amazing that so many people could study one phenomenon for so long and gain such little understanding of it." It is generally agreed that, despite more than seventy years of study, we still know next to nothing about the complex nature of leadership. (cf. Fleishman & Hunt, 1973; Fiedler, 1967; Stogdill, 1974)

THEORETICAL VERSUS EMPIRICAL DEVELOPMENT

Not only do theorists disagree on what leadership as a concept is; they also disagree as to whether, at this stage of development in its study, we should emphasize the theoretical development so as to generate

a coherent conceptual framework for further explorations, or the empirical investigation so as to provide solid foundations for further theoretical constructions. For example, Hage and Aiken (1970:124) expressed that "unfortunately there has been inadequate research on the relative importance of leadership style." Steers and Porter (1975:112) repeated such an opinion: "it becomes evident that the amount of theoretical and/or prescriptive material on leadership far outweighs the amount of empirical research on the topic." On the contrary, Gibbard, et al (1974:84) claimed that "...experimentation and attempts at innovation have proceeded much more quickly than have theoretical and empirical work in this area. Thus, we find a proliferation of techniques and consultative activities with no coherent conceptual foundation and only isolated efforts to provide conceptual leadership." Fiedler (1967) expressed a similar opinion that theoretical construction has failed to keep pace with empirical research.

PROBLEMS OF DEFINITION

One of the most important factors that can account for the confusion and anxiety in the studies of leadership is the disagreement on the definition of leadership. There is a widespread disagreement as to what leadership as a concept reflects in the empirical world. Leadership is a highly abstract term, and the most important, and yet most difficult problem we must resolve is that of intersubjectivity. The confusion in the studies of leadership, is to a great extent an accurate reflection of the confusion in the conceptua-

lization of leadership. As Tannenbaum, et al pointed out:

The word leadership has been widely used...yet there is widespread disagreement as to its meaning. Among social scientists, the theoretical formulations of leadership concept have continued to shift, focusing first upon one aspect and then upon another. (1961:22)

The disagreement can be demonstrated by the following list of definitions given by a number of prominent leadership theorists throughout the years:

Leadership is:

- an interpersonal relation in which power and influence are unevenly distributed so that one person is able to direct and control the actions and behavior of others to a greater extent than they direct and control him. (Fiedler,1967)
- an interpersonal influence, exercised in situations and directed, through the communication process, toward the attainment of a specified goal or goals. (Tannenbaum, et al ,1961)
- the exercise of authority and the making of decisions. (Dubin,1951)
- the influence of one person on another. (Gibbs,1969)
- the ability to persuade or direct men without use of the prestige or power of formal office or external circumstances. (Reutor,1941)
- the ability in getting others to follow him. (Cowley, in Hemphill,1950)
- the process of influencing group activities toward goal setting and goal achievement. (Stogdill,1950)
- the influential increment over and above mechanical compliance with the routine directions of an organization. (Katz & Kahn,1966)
- salient initiativeness. (Cooley,1909)
- the initiation of acts which result in a consistent pattern of group interaction directed toward the solution of a mutual problem. (Hemphill,1950)
- the process of initiating and facilitating member interaction. (Bales & Strodbeck,1951)

- the behavior that stimulates patterning of the behavior in a group. (Gouldner,1950)
- the creation of the most effective change in group performance. (Cattell,1951)
- the closeness to realizing the norm the group values highest; this conformity gives the leader his high rank, which attracts people and implies the right to assume control of the group. (Homans,1950)
- the capability of providing an interpretation of the world outside the immediate group. (Katz and Lazarsfeld,1955)

It is evident from the preceding list that leadership has been conceptualized in a variety of ways. There appears to be little consensus as to whether the term leadership indicates some special characteristic of a person, a specific category of behavior, a sociometric relation, a social function, initiation, an exchange relation, or a power relation.

PROBLEM OF PREMATURE APPLICATION

An urgent problem that we are facing today is the large scale application of the little, unorganized knowledge of leadership in attempt to solve various problems. Cohen described the lack of coordination among these attempts:

Leadership has been recognized to an increasingly greater extent as one of the significant aspects of human activity. As a result, there is now a great mass of "leadership literature" which, if it were to be assembled in one place, would fill many libraries. The great part of this mass, however, would have little organization; it would evidence little in the way of common assumption and hypothesis; it would vary widely in the theoretical and methodological approaches. To a great extent, therefore, leadership literature is a mass of content without any coagulating substance to bring it together or to produce coordination and point out interrelationship. (1958:43)

After World War II, especially between 1955-1965, there was an outburst of leadership literature in the form of training manuals. Various techniques such as T-group, behavior modification, role playing, psychodrama, sociodrama, and business games were introduced into leadership training. Leaders were told to be democratic, sensitive, initiative; or authoritative, firm, and aggressive, and so on. This, indeed, created a great confusion. It reflected the urgent need for knowledge in leadership process as an alternative technique of organizational engineering. It also reflects the confusion among theorists.

PURPOSE OF THE STUDY

The widespread discrepancies in the relation between leadership and organizational effectiveness and in the conceptualization of leadership necessitate a critical investigation of the current developments in the studies of leadership, so as to realize our current location in the evolution of theories of leadership. Such a study is also needed to clarify our objectives and our conceptual framework.

Concerns have been expressed as to whether the existing theories of leadership deserve to be called "theories" (Stogdill, 1974:23). It is therefore imperative to evaluate current theories in the hope that we can specify the inadequacies to be corrected. Perhaps the most influential theory in the area of leadership today is Fiedler's Contingency Theory of Leadership Effectiveness (Johnson and Ryan, 1976). It is also the theory with the highest predictive power. Its wide acceptance is evidenced by the large number of studies and publications on this

theory in the past decade. It seems to be the one theory that has been the most widely supported. The fact that the theory receives widespread support and that anxiety and uncertainty yet exist among theorists today, leads one to suspect that the Contingency Theory fails to provide a sufficient structure for the understanding of leadership. This paper will provide a critical analysis of the merits as well as the weaknesses of the theory. It will attempt to locate the areas of uncertainty in the theory and suggest alternative approaches for its modification.

It will be contended later in this paper that the study of leadership has been dominated by a form of psychologism. However, as more and more studies have revealed the low credibility of the Trait theory of leadership, it seems only appropriate to re-orient ourselves toward the conceptualization of leadership as a social relation. The contingency theory seems to be the most successful attempt, so far, in moving leadership conceptualization away from the previous psychological determinism, and integrating the aspect of social interaction into the studies of leadership. Precisely because of this re-orientation, led by the contingency theory, it deserves to be reviewed in terms of its sociological contributions and implications.

A number of recent studies have raised questions concerning the external validity and reliability of the instruments of the contingency theory. This paper will attempt to analyze these criticisms methodologically as well as theoretically.

This paper will be organized in the following fashion: Chapter II will

provide a brief review of previous theories of leadership. This is to clarify the historical background of the contingency theory, and to provide a frame of reference for the location of the contingency theory in the development of leadership studies. It is also the author's intention that the historical review of leadership will provide a sense of continuity in leadership studies. The immediate situation that necessitated the formulation of the contingency theory will be analyzed in Chapter III. The important features of the contingency theory such as its theoretical orientation, instrumentation, and implication will be presented in this Chapter. Chapter IV will be a critical analysis of the theory. Special emphasis will be placed on the difficulties of its operationalization and instrumentation. Suggestions for the modification of the theory will also be presented in this chapter. In Chapter V, the position of the contingency theory in the larger spectrum of leadership study will be discussed and suggestions will be made for future directions in leadership studies.

In the study of leadership, two basic questions are asked: 1) what makes a particular individual a leader? and 2) what makes a certain individual who is in the position of leadership more effective than others? This paper will stress the latter aspect. With the ever increasing degrees of specialization, professionalization, and bureaucratization in modern organizations, the problem of what makes a particular leader more effective than others appears to be a more pressing question. To concentrate on this problem is to increase the temporal relevancy of

this study.

It is also recognized that the study of the function of leadership represents a significant aspect of the overall study of leadership. However, it is the intention of this paper to investigate the role of leadership in organizational change as it is postulated by the contingency theory. Therefore, this paper will not concern itself with the functional dimensions of leadership. In essence, this paper will attempt to answer the question of how leadership influences organizational effectiveness, rather than for what purpose leadership exists. It is assumed in this study that leadership does serve a number of social functions and is both justifiable and inevitable. It is a matter of attempting to improve the quality of its existence.

CHAPTER II

REVIEW OF PREVIOUS THEORIES

The study of leadership in the last seventy years has shifted from one theoretical approach to another. Theoretical developments prior to the contingency theory can be roughly divided into two stages: the study of leadership traits, and the study of leadership style. Although they seem to be different approaches, there is a basic theoretical continuity linking all these theories together. Throughout the years, we have slowly and painstakingly come to realize that the physical appearance, the personality of leaders and the nature of the leader-follower relations are all significant attributes of leadership studies. Neither one of the approaches can sufficiently explain all the complicated dimensions of the leadership phenomenon.

THE STUDY OF LEADERSHIP TRAITS

The study of leadership traits had its origin in the earlier hereditary theory of leadership. Before the twentieth century, the dominating view of leadership was basically hereditary in nature. It was believed that leaders were born with certain qualities that made them leaders. The myth of the Heavenly Mandate of ancient Chinese emperors is a case in point. Ancient Chinese emperors were believed to be chosen by Heaven. They were typically addressed as Sons of Heaven. Thus, the

national leader was that someone who possessed the Heavenly Mandate. A paralled case in Western Civilization is the infallibility of the Pope of the Roman Catholic Church regarding church doctrines. The Pope, who is believed to have been chosen by God, supposedly possesses a certain grace and quality that makes him the messenger of the Almighty. Bossuet and King James I both had declared the Principle of the Divine Right of Kings. They claimed that there was a special appointment, grace, or "charisma," which marked kings out from other men.

Perhaps the earliest organized hereditary theory of leadership was Carlyle's (1907) theory of heroes in 1841. In his essay, Carlyle attempted to convey the idea that the leader was a person with some special inborn qualities that enabled him to capture the attention of the masses. The first "objective" study of leadership was Galton's (1909) historical study in 1879. After examining the hereditary backgrounds of a number of great men in history, Galton concluded that genius would triumph: men who attained eminence possessed exceptional ability.

The contention of the hereditary approach to leadership was soon challenged by environmental theorists such as Person (1928) who felt that the unique characteristics of the leader were not inborn, but rather shaped by the environment. This was, indeed, a case of the nature versus nurture argument.

To resolve this argument, early theorists integrated the ideas of environmental determinism and formulated the Trait Theory, better known

as the "Great Man" Theory. This argument was simple enough: while the personality of the leader is shaped by the environment, it is the personality that makes him the leader. In other words, the special personality of the leader is the a posteriori product of the environment, yet the a priori condition to acquire positions of leadership. Although that special quality in a leader was not considered inborn, it was that quality that enabled him to delegate to followers. Regardless of the environmental factors, the Great Man Theory still basically viewed the leader as a monolithic figure.

Bernard (1926), Bingham (1927), and Tead (1929) were a few of the earlier Great Man Theorists. Their studies were typically exploratory in nature and lacked comprehensiveness. They generally listed a series of personality traits which they believed were possessed by leaders.

Smith's (1932) study represented the first comprehensive treatment of leadership from the approach of the Great Man Theory. After complaining that all previous studies were "victims of the incomplete development of sociological theories of their day," Smith proposed a list of seventeen personality traits which were claimed to be a comprehensive picture of leadership (Table 1).

Case (1933) summarized these into four categories of leadership traits: physical traits, temperament, character, and social expression; and he added two more attributes: prestige, and self-conception of own role.

As the Great Man Theory developed further, more attributes were added, and the list of traits became longer and longer. Besides the

personality and behavioral traits listed previously, new factors were added as determinants of leadership. Such factors as age,

1. Agressiveness	10. Linguistic ability
2. Emotional stability	11. Range of ideas
3. Finality of judgment	12. Ability to see all sides
4. Intelligence of judgment	of a question
5. Self-confidence	13. Inventiveness
6. Speed of decision	14. Self-control
7. Suggestibility	15. Concentration
8. Physical prowess	16. Perseverance
9. Sociability	17. Energy of action

TABLE 1. The Seventeen Personality Traits of a Leader
Listed by Smith (1932)

height, weight, physique, appearance, masculinity, visibility, experience, financial status, seniority; even the percentage of company stock held and happenstance were included. Socioeconomic status and religious affiliation were later added to the list as a result of Mill's study of the Power Elite (1956) which discovered that political leadership in the United States tended to have come from a few exclusive socioeconomic, or religious subgroups.

As the list became longer and longer until it practically included every known positive personality trait, it became obvious that any list which included everything discriminated against nothing. Theorists had actually, as Olmsted (1961) called it, been "solely riding a semantic merry-go-round." As there were no specific indications as to which personality trait was the determining one, the theory, which originated from the postulation that only certain people possessing certain

characteristics would emerge as leaders, resulted in an absurd formulation which, when applied empirically, would indicate that everybody was a potential leader, since most people are bound to possess at least a few of all those traits listed. Thus, the Great Man Theory, resembling the rise and fall of the studies of human instinct, was at least partially rejected by social scientists in the late 1940s.

Smith and Krueger (1933), Jenkins (1947), and Stogdill (1948) had surveyed the literature of the Great Man Theory of Leadership, and concluded that there were few consistent patterns of traits which were claimed to characterize leaders. Stogdill's study was the most comprehensive one in which he discovered that only four traits were consistently related to leaders. A leader was found to be frequently more intelligent, with better scholarship, more conscientious, and socially more active (Table 2).

It is obvious that the traits listed do not discriminate against one another. For instance, leaders were found to possess better scholarship (Table 2), and yet they were found less frequently to have greater knowledge; they were found more frequently related to intelligence, and yet less frequently to sounder judgment. It is questionable as to whether such distinctions of traits are actually semantic distinctions rather than intrinsic differentiations.

Although the Great Man Theory was found to lack consistency, later theorists tended to hold that a few traits were found to relate to leadership very frequently. This was, however, with the full recognition that there were no universal determinants of leadership. For example,

Nord (1972) maintained that dominance, intelligence, self-confidence, and empathy or interpersonal sensitivity often contributed to leadership. Silverman (1971) held that dominance, intelligence, and sensitivity as well as adaptation were traits frequently associated with leadership.

FREQUENTLY AND CONSISTENTLY

- More intelligent
- Better scholarship
- More conscientious
- More active socially

CONSISTENTLY

- More energetic
- Greater knowledge
- Sounder judgments
- Greater originality
- Greater persistence
- Greater adaptability
- More cheerful
- More self-confidence
- More popular
- More fluent in speech
- Greater insight into himself and others
- Better sense of humor
- More cooperative

INCONSISTENTLY

- Better emotional control
- More dominating
- More extroverted

TABLE 2. Traits Frequently Found in Leaders (from Stogdill, 1948)

Even though such factors as identified in Table 2 might tend to contribute to leadership, they only provide us with general subsets with a great number of elements within each subset. It is obvious that only a relatively small number of elements within these subsets will become leaders. The question, thus, remains as to what within these subsets make certain elements leaders and others followers. For example, Gouldner (1950) discovered that only individuals with intelligence marginally above the group norm would tend to emerge as leaders. Thus, only a small proportion of the elements in the intelligence subset would be leaders. Other studies would also make the validity of such an assertion based merely on frequency of association rather questionable. For example, Steward and Scott (1947) observed the behavior of a herd of goats, and reported that the correlation between leadership and dominance was merely coincidental. On the other hand, Hall and DeVore (1965) studied the social behavior of baboons and discovered that regardless of the fact that various groups of baboons were organized slightly differently, most groups were led by the strongest male. However, physical strength was found to be inconsistently related to leaders in human groups. Although it is questionable whether we can generalize results of studies of social behavior of lower animals to human groups, it could very well raise the question as to whether the Great Man Theory represents an ideological and cultural bias.

Gibbs (1969) claimed that the lack of relationship between personality traits and leadership could be due to four reasons: 1) existing measurement devices were not adequate; 2) the phenomenon of leadership

was one characterized by a complex pattern of roles, therefore, characterized by inconsistency; 3) studies made have been on groups which differed widely from each other, thus making comparison difficult; and 4) situational factors may well override personality traits.

While Gibbs gave a sort of an apologetic analysis of the conditions under which Great Man theorists had to work, Gouldner (1950) analyzed the content of the theory and pointed out at least five shortcomings. Those proposing trait lists usually do not suggest which of the traits are more important and which least. This has become a serious problem due to the fact that these lists were rather lengthy and quite exhaustive in terms of identified positive human personality traits. Another shortcoming is the fact that the traits mentioned in a single list are usually not mutually exclusive. As mentioned before, the distinction between traits would be no more than semantic differentiations. Trait studies had also failed to discriminate traits that had facilitated an individual's ascent to leadership and those enabling it to be maintained. The Great Man Theory also failed to identify how the traits were developed and how the behavior of the leader was organized as a result of these traits. The most important criticism is perhaps the fact that the Great Man Theory had assumed that the personality of an individual was merely an arithmetic summation of his personality traits. This neglects the question of how these traits were organized, for different organizations of the same set of traits could result in a completely different personality. It had also neglected the assertion that personality traits were reflections of a total personality. Therefore, a more

reasonable approach to the Great Man Theory would be the study of the total personality of leaders instead of singling out traits of personality. As Fromm has indicated:

The fundamental entity in character is not the single character trait but the total organization from which a number of single character traits follow. These character traits are to be understood as a syndrome which results from a particular organization or orientation of character (1947:57).

By the mid-1950s, theorists in general had given up on further pursuit of the Great Man Theory. It was generally accepted that the Great Man approach was inadequate in the investigation of the leadership phenomenon. As Thelen (1954) put it quite clearly:

On the whole, in the thinking of students of leadership, the ideal of the one-man leader, the paterfamilias, is on the way out. There is some doubt that the monolithic leader, working out his lonely destiny entirely by himself ever actually existed (1954:326).

THE STUDY OF LEADERSHIP STYLE

With the rejection of the Great Man Theory, social scientists had come to the conclusion that there were different types of leaders, each possessing a unique personality type. A number of typologies emerged as a result of this new approach. Most of the typologies emerged were bipolar dichotomies such as democratic versus autocratic style, permissive versus authoritarian, follower-oriented versus task-oriented, participative versus directive, consideration-initiation, organic-mechanistic, and so on. All these typologies can be roughly summarized into two ideal types: democratic and autocratic. A democratic style is characterized by a pattern of behavior that encourages group

members to determine their own policies; gives them perspective by explaining in advance the steps toward goal attainment; and gives them freedom to initiate their own tasks and interaction. An autocratic style is characterized by a pattern of behavior that determines all policy for group members; dictates methods of goal attainment; and actively directs tasks and interactions.

The relevant question thus becomes which type of leadership style is more desirable. When put into the organizational context or group context, the question becomes which leadership style would create a higher group or organizational effectiveness. The problem of leadership style became the central focus.

The question of leadership style is by no means a new question. It is a central ideological question which occupied many great minds such as Rousseau, Spencer, Hobbes and many other philosophers. The democratic leadership style was advocated as early as 500 B.C. in the writings of Lao Tze. In Tao Te Ching, Lao Tze claimed that:

The best leader is one whom no one knows.
The next best is one who is intimate with the people
and is flattered by them.
The next is one who is feared by the people.
The next is one who is held in contempt by the people.
Therefore, when one's sincerity is not sufficient,
one does not have the confidence of the people.
Be cautious! and spare words.
Then when work is done and things are accomplished,
people will say that things happened by themselves (Chang, 1975:45).

On the other hand, we see some rather logical observations made by prominent philosophers such as Hobbes who felt that if a society is left alone without authoritarian leadership, it would result in a state of "a war of all against all." In Mein Kampf, Adolf Hitler

made a rather reasonable assertion that for the sake of progress and efficiency, authoritarian leadership is the only viable alternative. He pointed out that a hundred fools combined together do not make a genius.

This classic debate in political ideology emerged again under the new approach to leadership studies. Prior to this period, organizational theorists had assumed that the Tayloristic Principle of Scientific Management (Taylor, 1911), widely prescribed by such organizational handbooks as Urwick's (1944) Elements of Administration, was the most desirable model of leadership style. Taylorism, emphasizing such organizational aspects as the scalar process, the chain of command, and the span of control, in essence, advocated the autocratic leadership style. The theory of scientific management was however severely attacked by a number of social scientists in the 1960s.

Three most prominent theoretical configurations that had challenged the position of Taylorism were McGregor's (1961) Theory X and Theory Y, Argyris' (1964) Theory of Organizational Dilemma, and Likert's (1967) Theory of Group Expectations.

McGregor postulated two types of organizational leadership styles. The Theory X leader attempts to direct and motivate people to fit the organizational needs through an autocratic style, based on the assumption that human nature is basically bad and that people are passive, uncooperative, and resistant to organizational needs. The Theory Y leader, on the other hand, based on the assumption that human nature is good and that people already possess motivation and desire for

responsibility, attempts to arrange organizational conditions through a democratic style in such a manner as to make possible fulfillment of their needs while guiding their efforts to achieve organizational objectives. It was maintained that if society is to achieve harmony and progress, we should consider the human side of an organization. Thus, the Theory Y approach is by far the more desirable leadership style.

Argyris perceived a fundamental conflict between the organization and the individual, which he called the organizational dilemma. It is the nature of organizations to structure member roles and to control performance in the interest of achieving specified organizational goals. However, it is the nature of the individual member, due to his own process of growth toward maturity, to desire to be self-directive and to seek fulfillment through exercising initiative and responsibility. A democratic leadership style would thus be needed to enable the organization to provide such human needs.

Likert suggested that leadership was a relative process in that the leader must take into account the expectations, values, and interpersonal skills of those with whom he is interacting. Therefore, the leader can build group cohesiveness and motivation only by providing freedom for responsible decision making and exercise of initiative.

The empirical basis for this humanistic approach to leadership was, however, not quite impressive. There were a large number of studies that had supported the hypothesis that democratic leadership style would bring about leadership effectiveness (cf. Houser, 1927; Kornhauser

& Sharp,1932; Smith,1942; Viteles,1953; Lawshe & Nagle,1953; Mann,1965), but at least an equally large number of studies had indicated that the opposite was the case (cf. Lyle,1961; Mahoney,1967; Shaw,1955; Gibb,1954; Lewin & Lippitt,1938; Berowitz,1953).

In the study by Lewin and Lippitt, authoritarian leadership style was found to produce groups with more submissiveness and dependence on the leader, to be characterized by more aggressive and domineering relationships between group members, to have less group cohesiveness, to engage in less work-minded conversations, to be less constructive in work activity in the absence of the leader, and to become more disrupted by frustrating situations. Hare (1953) on the other hand discovered that democratic leadership style tended to be more effective in changing group opinion; but found that, although there was a higher positive relationship between group effectiveness and leadership style, the differences between democratic and autocratic style were statistically insignificant.

There were an equally large number of studies that had indicated a diametrically opposite relation between leadership style and effectiveness. While Lyle's, Mahoney's, and Shaw's studies have all indicated that autocratic leadership style was related significantly to effectiveness, Gibb's study indicated that democratic leadership style was related negatively to follower satisfaction.

Campbell, et al (1970), Biddle and Thomas (1966), Jacob (1971), and Stogdill (1974) have surveyed the literature of leadership studies in this period. A synthesis of their survey indicates that there were

at least one hundred and seventy three studies done within this period, dominated by the humanistic theories and typically investigating the relations between leadership style and effectiveness. As a result of all these empirical researches, in studies that attempted to relate democratic leadership to effectiveness, forty-seven yielded positive relationships, thirty-two yielded zero relationships, and fourteen yielded negative relationships. In studies that attempted to relate autocratic leadership style to effectiveness, forty-seven yielded positive relationships, twenty-six yielded zero relationships, and seven yielded negative relationships (Figure 2).

It is obvious that there is an equal number of studies that have found democratic style related positively to effectiveness and those that have found that the opposite was the case. In fact, we can view the period between 1950 and 1965 as a relatively unproductive period. In spite of the fact that there were a large number of new developments in instrumentation and operationalization of leadership research, studies in this period tended to be repetitive in nature. Hypotheses such as "democratic leadership style is related positively to leadership effectiveness" were overused. Negative results tended to be interpreted as instrument errors or inadequacies, rather than the more fundamental problem of validity of propositions.

One can, in fact, view the debate between leadership styles in this period of time more as a debate over ideological preferences, rather than about objective scientific evidences. It is indeed questionable as to whether these studies have been results of a series

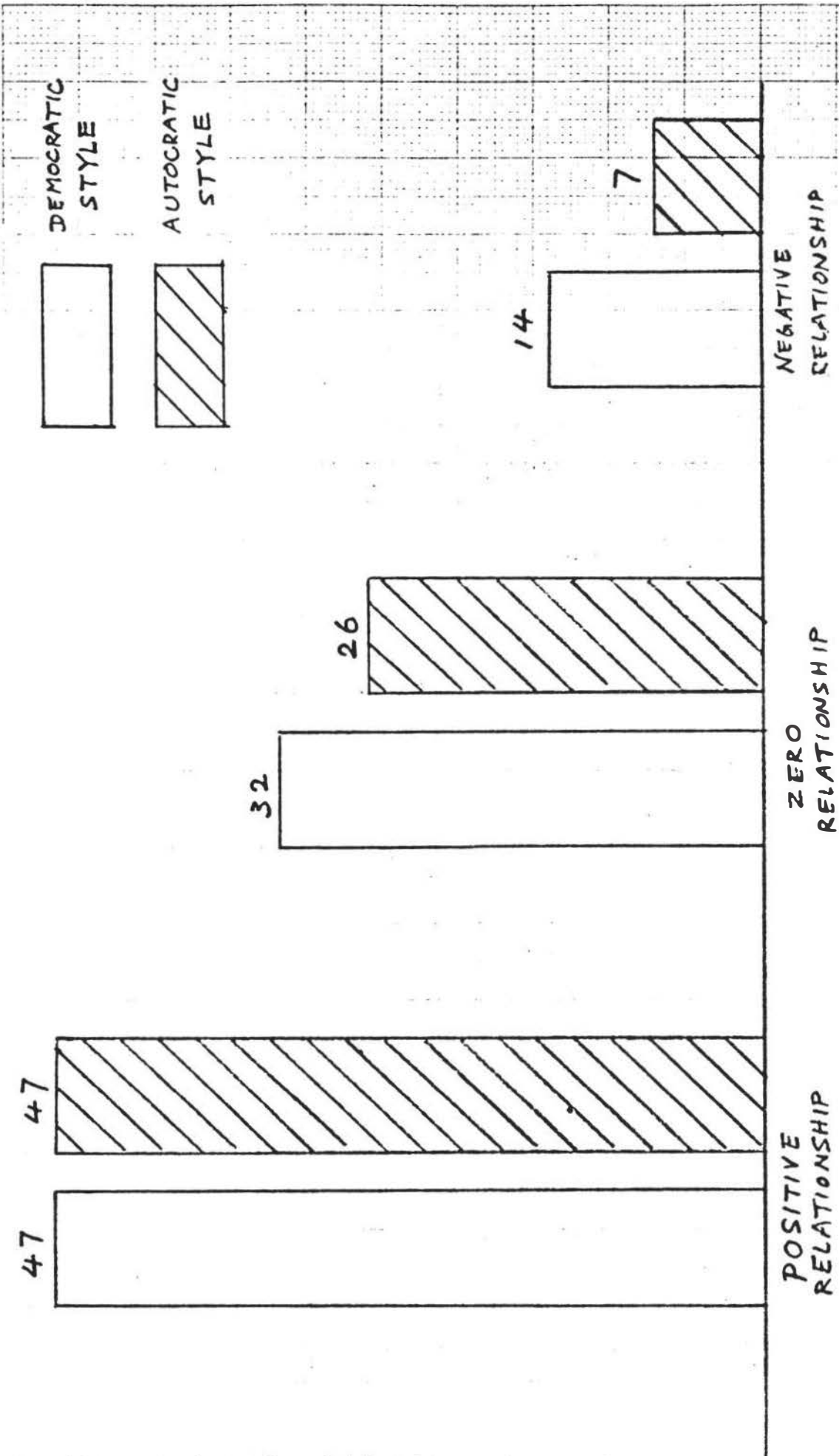


FIGURE 2. A COMPARISON OF THE NUMBER OF STUDIES SHOWING POSITIVE, ZERO, AND NEGATIVE RELATIONSHIPS TO ORGANIZATIONAL EFFECTIVENESS BETWEEN DEMOCRATIC AND AUTOCRATIC LEADERSHIP STYLES

of self-fulfilling prophecies.

LEADERSHIP TRAINING

Along with the development of the studies of leadership style, there was a rapid proliferation of leader training programs. Under the influence of the humanistic theories, manuals were composed and programs were designed to train leaders to be more sensitive to the needs of their followers, and to share the decision making responsibilities with their followers. Various training methods were applied to leadership training. Techniques such as the T-group method, sensitivity training, organizational development, and behavior modification were popularized.

Many questioned the value of such training programs. There were various problems associated with these training programs:

- 1) There was the confusion between democratic leadership style and laissez-faire leadership style. It was not unusual that leadership training groups failed to specify the distinctions between these two styles. Many times, instead of training democratic leaders, training groups ended up producing laissez-faire leadership style.

As House and Tosi pointed out:

After participative and supportive management had been discussed in seminar and with individual managers, [it had been] found that some managers interpreted this to mean a hands-off, be-warm-and-friendly-to-everyone-regardless-of-the-situation approach (1963:314).

- 2) There was the more basic theoretical problem of causality. All these programs have been operated under the assumption that the relations

between leadership style and effectiveness were not mere associations, but were actual causal relations. It was assumed that the independent variable leadership style is causally related to effectiveness. Being the independent variable, leadership style is thus assumed to be manipulatable at ease. This assumption was challenged by many social scientists such as Fiedler (1975) who maintained that it was easier to change almost anything in an organization than the personality of the leaders.

3) There was the problem of whether there exists an actual correlation between training and leadership performance. Fiedler and Chemer (1975) pointed out that on the average, people with much training perform as well as people with little or no training. Campbell, et al (1970) and Nord (1972) maintained that there was no evidence that any particular leadership training method consistently improves organizational performance. Leadership training is typically a didactic approach. It was doubtful whether improving the sensitivity of a leader or instructing the leader to be more considerate would in reality alter any behavior or even behavioral orientation of the leader. A didactic leadership training program is indeed analogous to a situation in which a person tries to change another person by asking him to be more lovable. The effectiveness of such an approach is minimal.

4) There was the problem of expectations of the followers. This problem is two-fold: the expectation of the members toward the leader, and the expectation toward other group members. The expectation of the member toward the leader is formed through a period of association,

and is to a great extent determined by the overall organizational structural orientation. Groups that have been under an autocratic leader for a considerable period of time will develop and adjust to, or even require, more autocratic leadership practices. Training a leader to be democratic under these circumstances may affect the group adversely because such a leadership style is not in keeping with the group's needs and expectations. After a leader has been trained to be more democratic, he creates a situation in which followers can participate in the decision-making process. This can be effective only if the followers do expect to participate. The expectation to participate is, in turn, very much determined by other variables. For example, Stoltzfus (1970) discovered that the follower expectation to participate in decision making was directly related to his bureaucratic rank, his age, his self-perception of own ability to influence administrative change, and his attitude that such participation is appropriate to his position. Aside from these variables, there is the variable of peer group pressure against participation. Berkowitz (1953) discovered that group members who participated in decision making, when such functions were viewed as basically leadership functions, were reacted to negatively if their behavior was seen as challenging the position of the leader as the group's major behavioral director. In summary, even if leadership training does change the behavior of the leader, it is rather doubtful whether such change can be successfully transmitted to the group.

Some even felt that these leadership training programs have damaged the overall study of leadership because it has taken away the attention of talented people who otherwise might have devoted their talents to leadership research (Fleishman & Hunt, 1973).

PSYCHOLOGISM

Both the studies of leadership traits and those of leadership styles were dominated by a form of psychologism. They essentially assumed that the personality or behavioral traits of the leaders are the sole determinants of leadership and leadership effectiveness. The psychological attributes of the phenomenon were assumed to be the independent variables. Concepts such as self-actualization, personality maturation, authoritarianism, and hierarchy of needs were many times over-emphasized. The domination of this form of psychologism, in fact, has often existed at the expense of other factors of leadership.

Many other factors could be as important as the personality factor in explaining the leadership phenomenon, or in engineering leadership effectiveness. For example, Goldberg (1955), through the leaderless group technique, discovered that a group member was perceived as the group leader more often when his position in a communication network was more central. Medelia (1954) studied followers in military environment and discovered that followers perceived their leaders' "human relation mindedness" decreasing as group size increased. Social scientists started to realize that in order to have a reliable

understanding of leadership, other variables had to be incorporated into their theories and research.

CHAPTER III

THE CONTINGENCY THEORY OF LEADERSHIP EFFECTIVENESS

As social scientists came to realize that neither the personality, nor the behavioral orientation of the leader alone can validly explain or reliably predict the phenomenon of leadership, they have generally accepted the premise that other variables have to be considered. At least three variables were then considered - the leader, the follower, and the situation. It soon became obvious that leadership was a relative interactional process with a dynamic nature, and that leadership effectiveness was determined by the situation and the nature of the interaction involved.

THE NEED FOR A SITUATIONAL THEORY

Hamblin (1958) observed groups engaged in complex tasks. In his study, the variables were manipulated in such a way that after having learned the rules, some of the groups were exposed to a crisis situation. Hamblin discovered that during the crisis, group members were far more willing to follow an authoritarian leader. Leaders who did not respond rapidly and decisively to the crisis were rejected by the groups and replaced by others.

In Gouldner's (1950) three-year study of a gypsum plant located near the Great Lakes, which employed approximately two hundred people,

democratic leadership style was compared to autocratic style in terms of their effectiveness. Gouldner found that leadership was a relative process which was contingent upon the informal structure of the group. In his conclusion, Gouldner stated:

The power to hire and fire and to impose rules through sanctions is of limited value without the support of an informal organization (1950:122).

In his classic study of street gangs, Whyte (1955) discovered a similar process at work. It was again found that leadership was not a 'one-way street,' but rather a dual process. Even though it was true that the leader could influence the behavior of the group members, at every turn the leader was expected to "measure-up" by fulfilling the demands of that leadership.

Schuler (1976) discovered that follower satisfaction was relative to at least three variables: leadership style, the structure of the task, and the authoritarianism of the followers. Thus, it was concluded that all three variables should be incorporated into the study of leadership.

Hemphill (1950) further found that leadership style, instead of being an independent variable, was dependent upon the variable of group size. His study indicated that there was a tendency for the leader to behave in a more autocratic and impartial manner as group size increased.

Van De Ven, et al (1975) studied the interrelations between modes of coordination and situational variables. He discovered that the choice of utilizing the democratic coordination mode or autocratic

coordination mode was determined by at least three situational factors: group size, task structure in terms of difficulty, and task interrelatedness. When we place this into the context of leadership style, the overwhelming implication is that leadership style is affected by the above three variables.

In Merei's (1949) study, children who were rated by teachers as being leaders were separated from the rest of their peers. The other children were then divided into groups and were allowed to play together for a certain period of time. One leader was then introduced into each group. Through this method, Merei found out that leaders were unable to influence the group unless they took into account the group norm and practices which had developed during the period of playing together before the leaders were introduced.

Sanford (1952) systematized the findings of all these studies and identified three interacting and yet separable dimensions that should be included in the study of leadership: 1) the leader and his psychological attributes; 2) the followers and his problems, attitudes, and needs; and 3) the group situation. Sanford stated:

To concentrate on any one of these facets of the problem represents oversimplification of an intricate phenomenon (1952:47).

Such an assertion seemed to be shared by quite a number of social scientists (e.g. Gibb, 1954; Cartwright & Zander, 1953; Burke, 1963).

The overwhelming conception of leadership at this period seemed to be one that leadership and leadership style were dependent variables rather

than independent variables. The situational factor became the generally accepted common demoninator. The circumstances seemed to be mature for a situational theory of leadership. The atmosphere was in such a state that there were a lot of speculative suggestions without a coherent systematic treatment of the situational factors as they were related to leadership or leadership effectiveness.

The need was finally met by Fiedler's (1967) Contingency Theory of Leadership Effectiveness, sometimes known as the Situational Theory. It was readily accepted by social scientists as the first comprehensive theory of leadership. It is surprising, however, to know that the situational variable as a determiant of leadership effectiveness was suggested by Bogardus as early as 1929 (Bogardus,1929). He claimed that in order to learn leadership, a person should analyze situations and develop appropriate techniques for controlling them. Thirty-eight years later, after hundreds of studies, such suggestion finally gained recognition.

THE CONTINGENCY THEORY OF LEADERSHIP EFFECTIVENESS

The Contingency Theory of Leadership Effectiveness was formulated by Fred Fiedler (1967) as a synthesis of the situational variable and leadership style. The theory postulated that the effectiveness of a leader is contingent upon the relationship between the situation and the leadership style of the leader (Fiedler,1967). The main argument is that there are no born leaders, nor is there a universally or intrinsically best leadership style that could produce group effective-

ness regardless of the situation. It was further argued that it is easier to change almost anything in an organization than changing the leadership style of a leader. Therefore, to improve the effectiveness of a leader, one does not attempt to improve the leader through some presumably superior training techniques, or behavior/personality modification, but by matching the right kind of leader to the right kind of situation, or by engineering the situation in such a way that it matches the leadership style of the leader.

The contingency theory does not only offer an alternative method of improving leadership effectiveness, it also offers a more plausible method of leader selection. Given the shortage of technically competent leaders today, especially in some highly specialized areas (Fiedler, 1965), it is questionable as to whether we can afford to select leaders by using a person's behavioral orientation as a criterion. The contingency theory seems to be able to resolve this problem since the significance of leadership style is much reduced.

OPERATIONALIZATION

The theoretical structure of the contingency theory of leadership effectiveness basically involves the manipulation of two variables: leadership style and situational favorableness. Leadership style is operationalized by the application of the Esteem for Least-Preferred Coworker Scale which is an instrument that would presumably place a person's leadership style somewhere on a relation-orientation -- task-orientation continuum. The situational variable is operationalized

in terms of three factors: leader-member relations, task structure, and position power.

THE LPC SCALE

The Esteem for Least-Preferred Coworker Scale (LPC) had its origin in the Assumed Similarity between Opposites Scale (ASo). The ASo Scale consists of a list of eight-interval bipolar adjective items of personality characteristics (Figure 3). A value of eight points is assigned to the favorable pole of each item, while a value of one point is assigned to the unfavorable pole. A person who is in a position of leadership is given two ASo questionnaires. He is asked to think of a coworker, in the past or present, with whom he has the most difficulty working; and also a coworker he most likes to work with. The leader is asked to describe his least-preferred coworker on the first questionnaire, and his most-preferred coworker on the second, by indicating their relative position on the one- to eight-point scale between the two diametrically opposite adjectives of each item on each scale. The ASo score of the leader is determined by the total difference between the item scores in each of the two questionnaires. The computation of the ASo score can be mathematically expressed in the following fashion:

$$ASo = \frac{K}{\sqrt{\sum_{i=1}^n (C_{mpi} - C_{lpi})^2}}$$

K = constant C_{mpi} = most-preferred coworker score on item i
 C_{lpi} = least preferred coworker score on item i

Pleasant	: <u>8</u> : <u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u> :	Unpleasant
Friendly	: <u>8</u> : <u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u> :	Unfriendly
Rejecting	: <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : <u>8</u> :	Accepting
Helpful	: <u>8</u> : <u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u> :	Frustrating
Unenthusiastic	: <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : <u>8</u> :	Enthusiastic
Tense	: <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : <u>8</u> :	Relax
Distant	: <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : <u>8</u> :	Close
Cold	: <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : <u>8</u> :	Warm
Cooperative	: <u>8</u> : <u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u> :	Uncooperative
Supportive	: <u>8</u> : <u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u> :	Hostile
Boring	: <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : <u>8</u> :	Interesting
Quarrelsome	: <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : <u>8</u> :	Harmonious
Self-assured	: <u>8</u> : <u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u> :	Hesitant
Efficient	: <u>8</u> : <u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u> :	Inefficient
Gloomy	: <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : <u>8</u> :	Cheerful
Open	: <u>8</u> : <u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u> :	Guarded

Figure 3. The ASo/LFC Scale

A high ASo score reflects that the individual leader perceives his most- and least-preferred coworkers as similar. A low ASo score shows that he perceives them as relatively dissimilar.

The Esteem for Least-Preferred Coworker Scale (LPC) is essentially a modification of the ASo Scale. To obtain the LPC score of a leader, the subject is given only one questionnaire identical to those used in the ASo Scale (see Figure 3), and he is asked to describe only his least-preferred coworker on each of the eight interval bipolar items of the questionnaire. Again, each item is given a value of one at the least favorable pole, and a value of eight at the most favorable pole. The LPC score of the leader is the simple arithmetic summation of the item scores.

The LPC scores are interpreted as an indirect indicator of the personality tendency of leaders. In other words, the way a leader describes his least-preferred coworker presumably reflects a general underlying behavioral orientation of the leader, independent of the actual characteristics of the co-worker chosen and described. Basically, Fiedler assumed two diametrically opposite types of personality tendencies. The leader with high LPC scores in relation to the mean score are interpreted as relation-oriented, while the low LPC leaders are task-oriented (cf. Fiedler, 1967; Fisher, 1974; Hill, 1969). The theoretical rationale for this interpretation is that a high LPC score indicates that the leader tends to describe the person he least-preferred to work with with favorable adjectives. This reflects

the fact that he makes a fine differentiation between the personality of the coworker and his performance. He is constantly striving to maintain a good relationship with his followers. Therefore, even though he does not prefer to work with this particular individual, he would still attempt to point at the desirable characteristics of the person. A low LPC score, on the other hand, indicates that the leader tends to describe his least-preferred coworker with unfavorable adjectives. This is interpreted as reflecting a task-oriented leader. He links the performance of the coworker with his personality characteristics. In other words, the low LPC leader has the idea that if a coworker cannot do a good job, this worker is not worth much in terms of personality.

In relation to the mean score, low LPC scores are found to run approximately 1.2 to 2.2, while high LPC score range from 4.1 to 5.7.

The correlation coefficient between LPC and ASo scores is found to be between .80 and .90. Due to such a high level of reliability in terms of stability and consistency, the two scores are used interchangeably; sometimes referred to jointly as the ASo/LPC score.

SITUATIONAL FAVORABLENESS

The aspect of the situational factor that is claimed to influence the effectiveness of the leader in the contingency theory is the favorableness of the situation. Situational favorableness is defined as the degree to which the leader has control and influence; therefore, feels that he can determine the outcomes of the group interaction.

Although some would feel that this is not necessarily true for "good" leaders; however, it is the "effective" leader that this theory is concerned about. Situational favorableness is determined, in turn, by three other variables: position power of the leader, task structure, and leader-member relations.

Position power is defined as the degree to which the position of the leader in the structural hierarchy of the group or organization enables him to get his group members to comply with and accept his direction. This is the legitimate power given to the leader by the organization to exercise reward and punishment. This is operationally measured by a checklist of eighteen items, each of which indicates the presence or absence of a certain aspect of position power (e.g. Leader is expected to suggest and evaluate the members' work). Each item is given an equal value of one when the condition described by the item statement is present, and a value of zero when such a condition is absent. The relative degree of position power possessed by a leader is obtained by an arithmetic sum of the item scores. The median is used as the cut-off point for high and low degree of position power.

Task structure is the degree to which a given task is spelled out step-by-step for the group and the extent to which it can be done "by the members" or according to a detailed set of standard operating instructions (Fiedler, 1965:117). In other words, task structure is the degree to which the leader knows exactly what to do and how to do it. A highly structured task is easier for the leader to enforce because he does not have to resort to the power given to him by the organiza-

zation to direct the members. The power, in this case, is inherent in the task description. Since high task structure makes it easier for the leader to lead, it is considered a favorable dimension of the situation, while a low task structure is considered unfavorable. Task structure is operationalized in terms of Shaw's (1963) Dimensions for the Classification of Tasks. Only four out of the ten dimensions suggested by Shaw are utilized since they are the only ones that are directly related to the task structure. These are Goal Clarity, Decision Verifiability, Solution Specificity, and Goal-Path Multiplicity. Goal Clarity is the degree to which the task is spelled out specifically and clearly to every member of the group. Decision Verifiability is the degree to which the correctness of the solution can be demonstrated either by appeal to authority, by logical procedures, or by feedback. Solution Specificity is the degree to which there is more than one correct solution. Goal-Path Multiplicity is the degree to which the task can be solved by a variety of procedures. An eight-interval scale is constructed for each of these dimensions. A value of eight would indicate that the dimension clearly exists, and as it progress down the scale, the existence of the dimension becomes less obvious. This is with the exception of Goal-Path Multiplicity, in which case, the higher the score, the less obvious the existence of this dimension. The situation is evaluated in terms of these four scales; and the relative degree of task structure will be obtained simply by summing the total item scores. A mean score of five is used as a cut-off point for dichotomizing task structure into high and low structures.

Leader-member relations is the degree to which the leader is accepted by the members. Leaders are assumed to have more influence on their followers when they have a good relationship with their members. When a group has a good leader-member relations, the leader is liked, respected and trusted (Fiedler,1972:7). Group members, it is argued, would tend to follow the direction of the liked leader. At least three methods have been used to measure this situational dimension: 1) the leader's rating of the group atmosphere; 2) the members' rating of the group atmosphere; and 3) the degree to which the leader is sociometrically chosen by group members. The first two methods utilized a ten bipolar item scale describing the situation. The relative leader-member relations are obtained by summing the scores of the scales. Leader-member relations, under the third operational definition, is measured by administering a sociometric questionnaire to the group members. The relations can be determined by the proportion a leader is chosen within the sociometry of the group. The rate of fifty percent is used to dichotomize leader-member relations into good and bad relations.

THEORETICAL STRUCTURE

By combining the three dichotomized situational dimensions together, eight types of situations emerged, which Fiedler labeled as Octant I to VIII (Figure 4). These eight Octants are arranged in terms of their relative degree of favorableness into a single continuum. To accomplish this, a hierarchy of relative contribution to the

favorableness of the situation by each of the three dimensions is established. The dimension of leader-member relations is interpreted as the most important variable. This is due to the assumption that a leader is effective when the leader-member relations are good, even in situations where the task is highly unstructured and the position power of the leader weak. In fact, a leader who is liked, accepted, and trusted does not need much position power. The task structure

	Favorable	-----								Unfavorable							
Octants	:	<u>I</u>	:	<u>II</u>	:	<u>III</u>	:	<u>IV</u>	:	<u>V</u>	:	<u>VI</u>	:	<u>VII</u>	:	<u>VIII</u>	:
Leader-member relations		Good		Good		Good		Good		Bad		Bad		Bad		Bad	
Task Structure		High		High		Low		Low		High		High		Low		Low	
Position Power		High		Low		High		Low		High		Low		High		Low	

Figure 4. The Eight Octants of Situational Favorableness as a Continuum

is argued to be the next most important dimension. Most groups exists for the purpose of performing a particular task, quite frequently for a larger organization in which the group is most likely to be a part. Therefore, the assurance of getting the task accomplished and meeting certain explicit specification is a main concern of both the group and the leader. A clearly spelled-out task structure would, thus, improve the enthusiasm of the group and decrease the leader's difficulties

to direct the group. The task structure is assumed to be more important than the position power because there is little room for resentment toward the leader since, in this case, it is clear that the leader acts merely as an agent for the larger structural hierarchy. Position power is assumed to possess the least importance in terms of its contribution to situational favorableness. Position power is usually used as a last resort when the authority or expertise of the leader is being challenged.

Given the above assumption, Fiedler proceeded to construct a continuum of situational favorableness. When all three dimensions are high as in the case of Octant I, the situation is highly favorable to the leader. When all three dimensions are low, as in the case of Octant VIII, the situation is very unfavorable to the leader. Since position power is the least important variable, Octant II is considered the second most favorable situation. By the same token, starting from Octant I, as one approaches Octant VIII, the situation decreases in favorableness. (see Fig. 4).

Basing on the data obtained from over sixty-four leadership studies, Fiedler categorized each study according to its situational favorableness and the LPC scores of the leaders. The LPC scores were then correlated with effectiveness. It was discovered that the correlation coefficient between leader LPC scores and effectiveness tended to approach -1.0 at the extreme Octants (I, II, VIII,), while it tended to approach $+1.0$ in the moderate Octants (Octant IV, V) (see Table 3 & Fig. 5).

Situational Favorableness	Median Correlation	No. of cases
Octant I	-.52	8
Octant II	-.58	3
Octant III	-.33	12
Octant IV	.47	10
Octant V	.42	6
Octant VI		0
Octant VII	.05	12
Octant VIII	-.43	12

TABLE 3. Median Correlation Between LPC Scores and Effectiveness in Each Octant (derived from Fiedler, 1967:156)

This shows that a high LPC score is associated with relatively low effectiveness in Octants I, II, III, and VIII. It is, however, associated with relatively high effectiveness in Octants IV, V, and VII. When the data are broken down and two graphs of situation against effectiveness are plotted, one for the high LPC leaders, another for the low LPC leaders (Figs. 6 & 7), we can see that high LPC leaders are more effective in Octants IV and V, moderately effective in Octants VI and VII, and ineffective in Octants I, II, III, and VIII. The reverse is the case for low LPC leaders.

Fiedler, thus, drew the conclusion that THE APPROPRIATENESS OF THE LEADERSHIP STYLE FOR MAXIMIZING GROUP PERFORMANCE IS CONTINGENT UPON

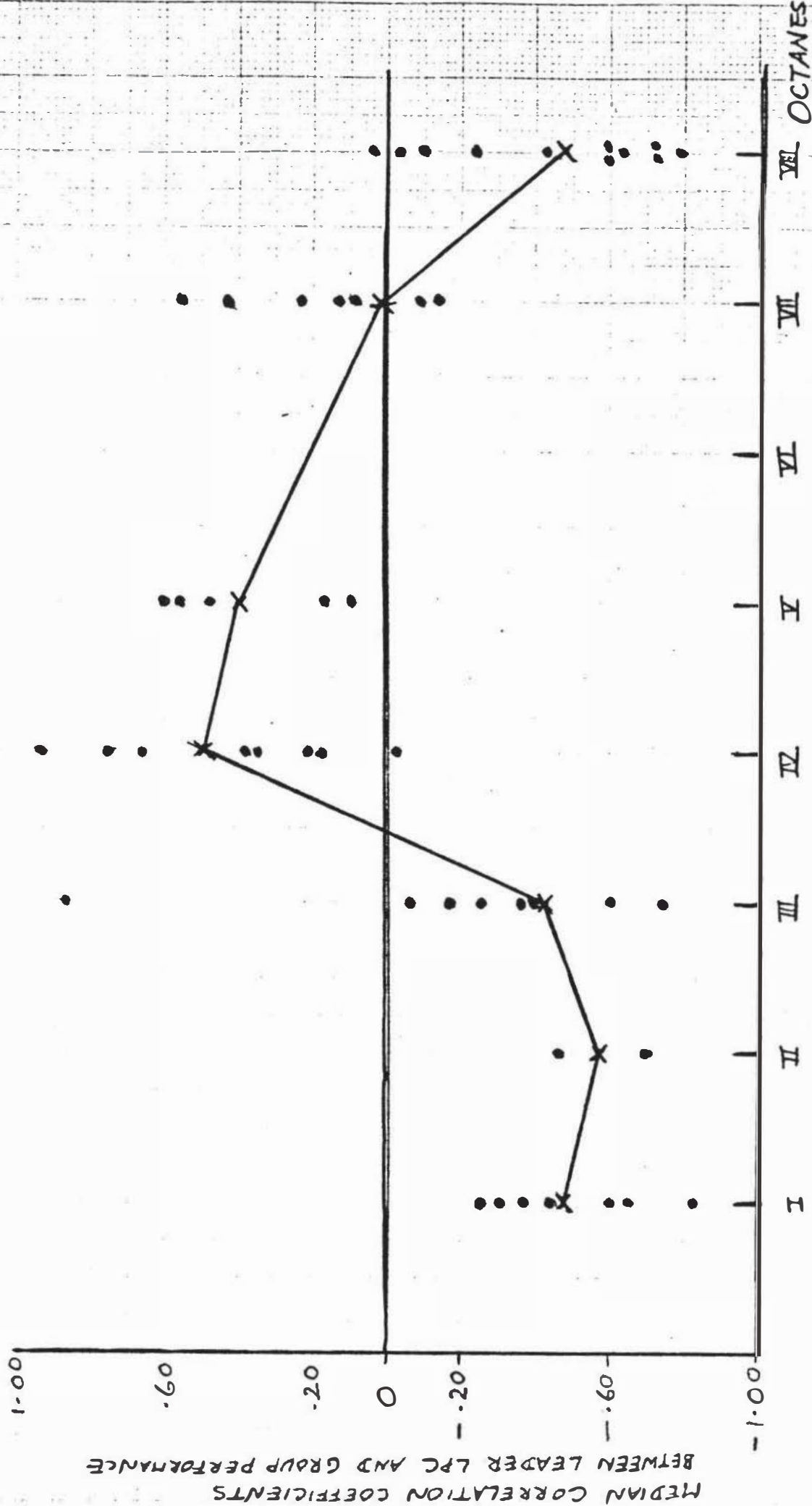


FIGURE 5. CORRELATIONS BETWEEN LPC SCORES AND GROUP EFFECTIVENESS

(ADOPTED FROM FIEDLER, 1967:146)

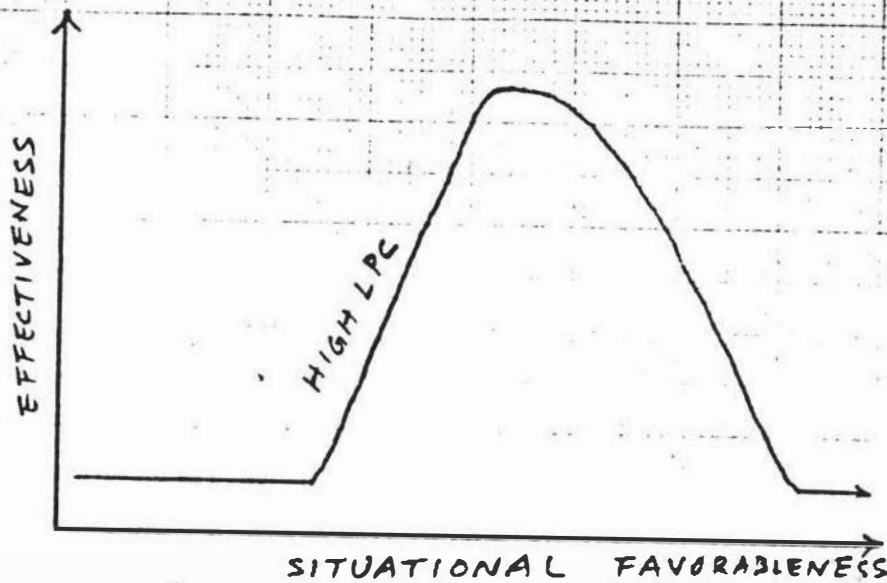


FIGURE 6. A GRAPHIC REPRESENTATION OF EFFECTIVENESS OF HIGH LPC LEADER IN RELATIONS TO SITUATIONAL FAVORABLENESS

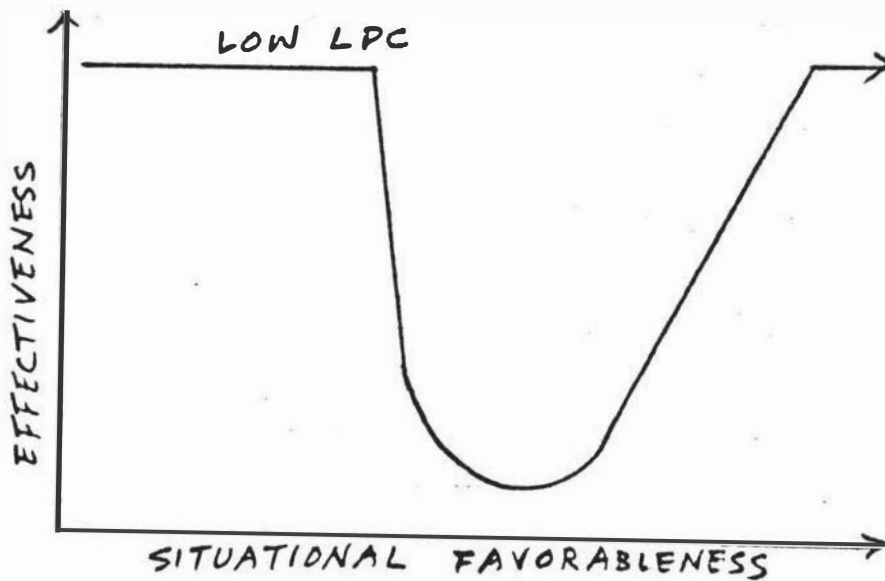


FIGURE 7. A GRAPHIC REPRESENTATION OF EFFECTIVENESS OF LOW LPC LEADER IN RELATIONS TO SITUATIONAL FAVORABLENESS

THE FAVORABLENESS OF THE GROUP-TASK SITUATION (Fiedler,1967:147).

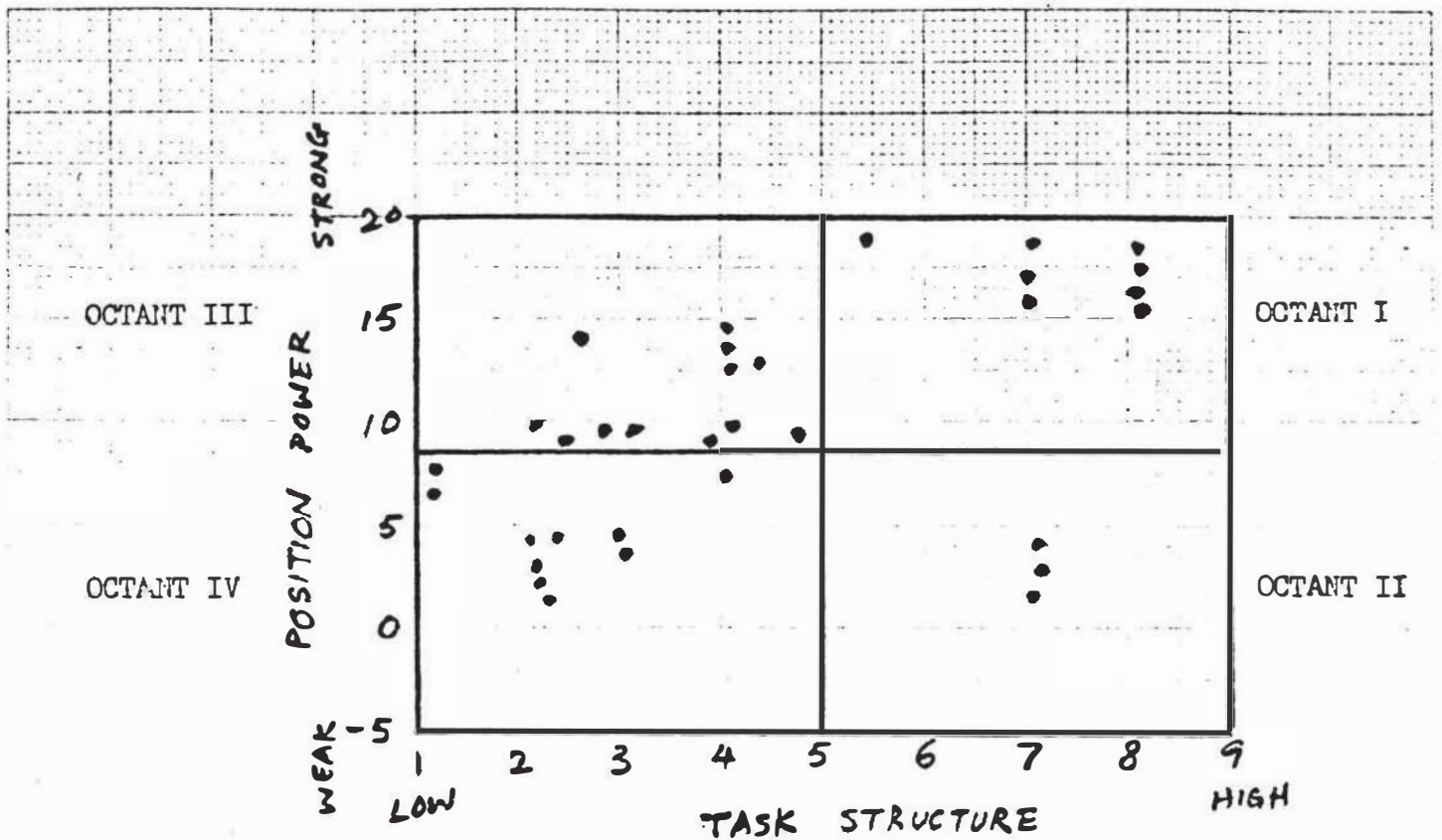
In general, he found the task-oriented (low LPC) leaders tended to perform most effectively in situations in which their control and influences are very high and also in situations in which they are very low. In contrast, relation-oriented (high LPC) leaders tend to perform best in situations in which they have only moderate control and influence.

He also found that uncertain and anxiety-arousing conditions tended to make the low LPC leaders concentrate on their relations with their followers. The opposite is the case in situations in which the leader is secure and in control.

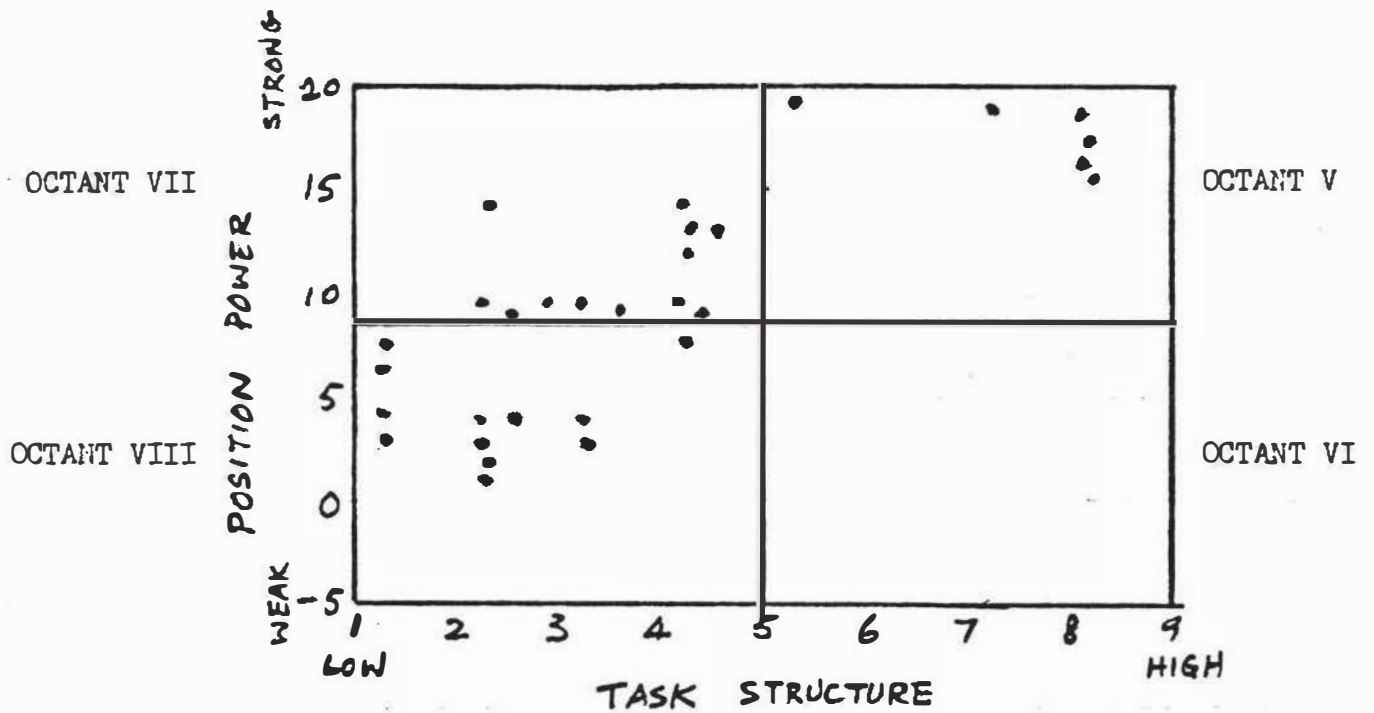
Limitation of the Theory

We can see from Table 3 that there are no group situations among the studies reported by Fiedler that can be classified as Octant VI. Further, groups with very high position power and very low task structure are also absent from Octant III and Octant VII which should theoretically consist of groups with these features (see Fig. 8).

One possible explanation of the absence of examples of Octant VI is the fact that it is rare that one finds a situation in which leader-member relations are low, position power is weak, but task structure is strong. These type of groups theoretically would have very short life-spans due to the fact that a disliked leader with low position power can readily be replaced, and the high task structure indeed can have little to contribute to the maintenance of his leadership position.



GOOD LEADER-MEMBER RELATIONS



POOR LEADER-MEMBER RELATIONS

FIGURE 8. SCATTERGRAMS OF CASE DISTRIBUTION ALONG THE DIMENSIONS OF POSITION POWER AND TASK STRUCTURE

(DERIVED FROM FIEDLER'S CORRELATION DISTRIBUTION SCHEME, FIEDLER, 1967, PP. 149)

The absence of situations with very high position power but low task structure as in the case of Octants III and VII could very well be because such situations are nonexistent. It is not easy to imagine a situation such as a president of a large company on a creative project, such as planning for an advertising campaign.

Note also that it is rare to find situations in which the leader-member relations are extremely poor. Fiedler did find such situations in his studies of bomber crews, antiaircraft units, open-hearth shops, and farm-supply companies. However, in general, these are exceptions rather than rules because an extremely disliked leader would either be replaced or cause the group to dissolve. Therefore, a poor leader-member relation in the Contingency Theory usually refers to a moderately poor relation only.

In a multiple regression analysis of the dimensions of situational favorableness as predictors of the LPC-effectiveness correlations, Fiedler (1971) discovered that the correlation coefficient between task structure and position power was .75--- a rather high correlation. Assuming that this is a rule rather than an exception, it could imply that we can expect the absence of situations in which differentiations between these two variables are great (i.e. very high position power with very low task structure, or vice versa).

Implication of the Theory

The Contingency Theory of Leadership Effectiveness is not only statistically sound, it is also conceptually quite logical.

In a very favorable situation in which the leader has considerable position power, is respected, and with a well-structured task present, followers are ready to be directed. A democratic style can create an adverse effect in this situation because the group does not expect or desire to participate in the decision making process, since everything is clearly defined. An example of this is an emergency situation in a mental hospital in which the person in charge is a licensed practical nurse. Regardless of the fact that the nurse might have little or no training in the area of mental health, there is a clearly defined strong position power since the nurse is in charge. What needs to be done is also clearly detailed by the hospital emergency policy and procedure. If the nurse is liked and respected, there will be no expectation of discussing what to do among the staff. Directions will be given by the nurse and readily accepted by the staff, and the performance will be effective at least in terms of efficiency. Therefore, it seems logical that a task-oriented leader is more effective in very favorable situations.

Consider on the contrary that a disliked department chairman in a University is asked to chair a volunteer committee composed of faculty members immediately below him to plan for a non-credit field trip to a firm. In this situation, the leader-member relations are poor since the chairman is disliked by the committee members; the position power is low since the committee consists of volunteers; and the task structure is low since there is no specification as to what firm to visit, what to look

for, etc. If the disliked chairman asked for committee member participation in decision making, the committee would either exhibit a lack of enthusiasm or end up arguing. Consequently, nothing would be accomplished.

In the moderate situations, such as Octant V in which the leader is poorly accepted, with high position power and high task structure; a diplomatic leader is logically more effective.

One way to improve the effectiveness of the leader, therefore, is by matching the high LPC leaders to moderately favorable situations, and the low LPC leaders to the extremely favorable or unfavorable situations. This method is, however, not always feasible. There are other factors such as the technical competence of the leader that need to be considered.

An alternative method of improving effectiveness is by changing the situation to match the need of the leader as indicated by the theory. For instance, the position power of the leader can be engineered by manipulating the structural hierarchy and the communication network. Giving or taking away powers from the leader or imposing sanctions on the group is another method. The task structure can be changed by changing the explicitness of a task description. This is, however, a limited technique, since some task structures such as planning a company picnic are more difficult to be made more explicit. In this case, an increase of information provided to the group might improve the task structure. In general, leader-member relations are most difficult to manipulate. Fiedler (1965) felt that they could be changed by altering the composition of the

group along the homogeneous-heterogeneous continuum.

The Contingency Theory does not only offer a new conceptual orientation, it also offers a completely different approach to leadership training.

CHAPTER IV

ANALYSIS OF THE CONTINGENCY THEORY

Fiedler's Contingency Theory of Leadership Effectiveness is rapidly becoming a significant part of the literature of organizational behavior. It has gained recognition by many prominent figures in Organizational Sociology and is included in most of the important texts of Complex Organization (e.g. Lawrence & Lorsch, 1969). It is the first theory that includes both leadership style and situational factors. Some even called it the "first comprehensive theory of leadership" (Johnson & Ryan, 1976).

The basic methodological approach in the establishment of the contingency theory of leadership effectiveness is quite impressive. While most of the previous theories have been inductive in nature, the Contingency Theory somewhat resembles a Grounded Theory (Glaser & Strauss, 1967). The semi-inductive nature of the theory was pointed out rather implicitly by Fiedler himself:

The theory summarizes the results of a 15-year program of research on leadership and a theory of leadership effectiveness which seeks to integrate these findings. In a sense, this is a progress report of a continuing research enterprise in which a number of my colleagues and students have been, and still are, actively participating (1967:i).

Whether an inductive theory is superior to a deductive theory is

highly debatable. On the one hand, Hume's Truism held that induction was never fully justified logically (Campbell & Stanley,1963:5); while on the other hand, Glaser and Strauss maintained that a Grounded Theory is relatively difficult to refute (Glaser & Strauss,1967). Regardless of this theoretical argument, one thing is quite certain -- that the contingency theory is constructed on antecedent data, i.e. data that are used to formulate the theory, rather than evidential data, i.e. data that are used to verify the theory; although the latter is also used in establishing the predictive validity of the theory. A theory which is founded on antecedent evidence is theoretically more difficult to be completely refuted by additional information or replaced by another theory. However, modification and reformulation may be inevitable.

The contingency theory is also methodologically superior to other leadership theories in that the data for at least two of the four variables can be obtained directly from institutionalized sources with minimal distortions. Position power is to a great extent institutionalized and is quite explicitly outlined in the organizational hierarchy. Task structure is, again, institutionalized and quite explicit. Although an element of subjectivity could be introduced in the scoring process of these two variables, these mistakes can be eliminated quite easily by referring to the information from the organization itself. The data for these two variables are more reliable due to the fact that there is no reliance on subjective observers, thus minimizing the problem of intersubjectivity. As

Carter, et al (1950) have shown, as the number of people observed increases, the reliability of the observation decreases. This problem is minimized since there is a greater reliance on the information provided by the organization than the direct observation of the investigators.

The predictive validity of the contingency theory was formally established by Fiedler (1971), and Chemer and Skrzypek (1972) independently. Fiedler reviewed 45 correlation studies performed after the establishment of the theory, and found that 34 of the 45 correlations reviewed were in the predicted directions. This is a finding which Fiedler found significant at the .01 level by binomial test. In terms of the situational dimensions, he found that with Octant VI omitted (no basis for prediction), six of the seven remaining octants were in the predicted directions. Chemer and Skrzypek performed one of the few full-scale eight-cell experiments, and showed that the new data formed relations in the predicted directions.

It was generally accepted that the contingency theory had a high level of external validity. The theory was induced from an empirical basis of over 60 studies of 21 different types of groups. Recent studies (e.g. Fiedler, 1966; Hunt, 1967; Shaw & Blum, 1966; Weinberg, 1975) have tended to support this theory in various conditions and groups. Mitchell, et al (1970:258) have pointed out the external validity of the theory:

The antecedent evidence for the contingency model is based on research in a wide variety of settings with

a number of different types of actors. Furthermore, the prior evidence is based on a number of different measures of group productivity. Based on the wide sampling of behavior, actors, and settings, we can conclude that the theory has fairly good external validity (1970:258).

Basing on the above information, the contingency theory seems to have met the basic requirements of a sound scientific theory.

PROBLEMS OF EXTERNAL AND PREDICTIVE VALIDITY

More recent studies have, however, questioned the external as well as the predictive validity of the theory.

Galinsky's (1975) study, for example, showed a relationship between leader LPC scores, situational favorableness, and effectiveness that was contrary to those that Fiedler and others were able to demonstrate.

Callarman (1973) studied 503 Pepsi-Cola Bottling Plants and found that task-oriented leaders performed best in intermediately favorable situations. This is diametrically opposite to the theory. Therefore, he concluded that the contingency theory was not applicable to business organizations. Although Callarman's generalization basing on data obtained from one particular business organization is unjustifiable, the study at least has shown that the theory is not applicable to Pepsi-Cola Bottling Plants.

Basing themselves on the contingency theory, Heier and Utecht (1976) hypothesized that successful military leaders had primarily held positions of leadership in situations that had been favorable to their leadership styles. The data obtained in their study were

subjected to the Chi Square Analysis. The Chi Square was found to be .51 which was not significant at the .05 level. Therefore, the null hypothesis was accepted. More specifically, the situations in which the successful leaders had held positions of leadership were not significantly different. The relationship demonstrated by the contingency theory, generalizing from this study, was not significantly better than pure chance.

Fahy's (1972) study of student teachers also failed to support the contingency theory. In his study, Fahy found that there were no statistically significant correlations between leadership style of the student teachers and their effectiveness, regardless of the situation. Singe (1975) also demonstrated that the contingency theory could not be generalized to the leadership patterns of multi-unit elementary schools.

Van Gundy (1975) formulated eleven predictive hypotheses based on the contingency theory. These hypotheses were tested and none of them were supported statistically. In some instances, the results were found to be statistically significant in the directions opposite to those hypothesized.

Mikols (1975) studied 151 Basic Camp cadets who attended the 1974 ROTC Basic Camp at Fort Knox, Kentucky. He discovered that there was no significant difference in mean performance scores for both high and low LPC leaders in very favorable, intermediately favorable, and unfavorable situations. Thus, he concluded that the contingency theory was not general enough to handle definitive

predictions of leader performance in a leadership training environment.

Jacobs' (1975) study involved 122 of New Jersey's suburban public school multi-disciplinary child study teams, and their chairmen. In his study, the leader-member relations (LMR) were held constantly good and the task structure (TS) was held constantly unstructured. Only the position power (PP) was manipulated. Therefore, in terms of the situational dimension, only Octant III (good LMR, low TS, high PP) and Octant IV (good LMR, low TS, low PP) were studied. The Spearman's Rho between leadership effectiveness and leader LPC scores were found to be .70 in Octant III and .80 in Octant IV. These are compared to Fiedler's predictions of $-.33$ in Octant III and $.47$ in Octant IV (Table 4).

Octant	Jacobs' Rho	Fiedler's predictions
III	.70	$-.33$
IV	.80	$.47$

TABLE 4. A Comparison of Jacobs' Findings to Fiedler's Predictions

Thus, the contingency theory was strongly supported in Octant IV, but rejected in Octant III.

Smith (1972) studied 32 United States Department of Labor Employability Development Teams. In his study, only leader-member relations were manipulated. Both task structure and position power were held constantly low. Therefore, only Octant IV (good LMR, low TS,

low PP) and Octant VIII (poor LMR, low TS, low PP) were studied. It was found that high LPC leaders were more effective than low LPC leaders in Octant VIII, a result contradictory to the contingency theory which predicted low LPC to be more effective in Octant I and VIII. It was further discovered that there were no significant differences in effectiveness between high and low LPC leaders in Octant IV.

Dvorak (1975) applied the contingency theory to the Expanded Food and Nutrition Education Program (EFNEP) of New York State Cooperative Extension. Task structure was held constantly unstructured. Thus only four octants were examined: Octant III (good LMR, low TS, high PP), Octant IV (good LMR, low TS, low PP), Octant VII (poor LMR, low TS, high PP), and Octant VIII (poor LMR, low TS, low PP). The outcomes of the study were in the predicted directions, but were reported to be statistically insignificant.

In Johnson and Ryan's (1976) study of university students, the leader-member relations were held constantly good. Therefore, Octants I, II, III, and IV were studied. Leadership effectiveness were correlated with leader LPC scores in each octant. The correlation coefficient in Octants I, II, III, and IV were found to be respectively .01, .16, .15, and -.30. These showed that correlations were not significant, and were in the opposite directions (Table 5).

Perhaps the most comprehensive study with results contradictory to Fiedler's predictions was the study by Graen, et al (1970). In the study, antecedent results of a number of studies were compared to the

Octant	Johnson and Ryan's Findings	Fiedler's Predictions
I	.01	-.52
II	.16	-.58
III	.15	-.33
IV	-.30	.47

TABLE 5. A Comparison of Johnson and Ryan's Findings to Fiedler's Predictions.

evidential results. The mean correlations are tabulated in Table 6. Figure 9 is a graphic representation of the comparison. Evidently, the evidential data failed to support the theory within each octant and across the dimension of situational favorableness.

	Octants							
	I	II	III	IV	V	VI	VII	VIII
Antecedent	-.54	-.60	-.17	.50	.41	-	.15	-.47
Evidential	-.16	.08	-.12	.04	.09	-.21	.15	.08

TABLE 6. Antecedent and Evidential Mean Correlations

In summary, the contingency theory was found unable to be generalized to business organizations, military leaders, child study teams, school teachers and principals, leadership training settings, government labor study agencies, nutrition education programs, and college students. Table 7 is a break-down of studies that have shown contradictory results in each octant.

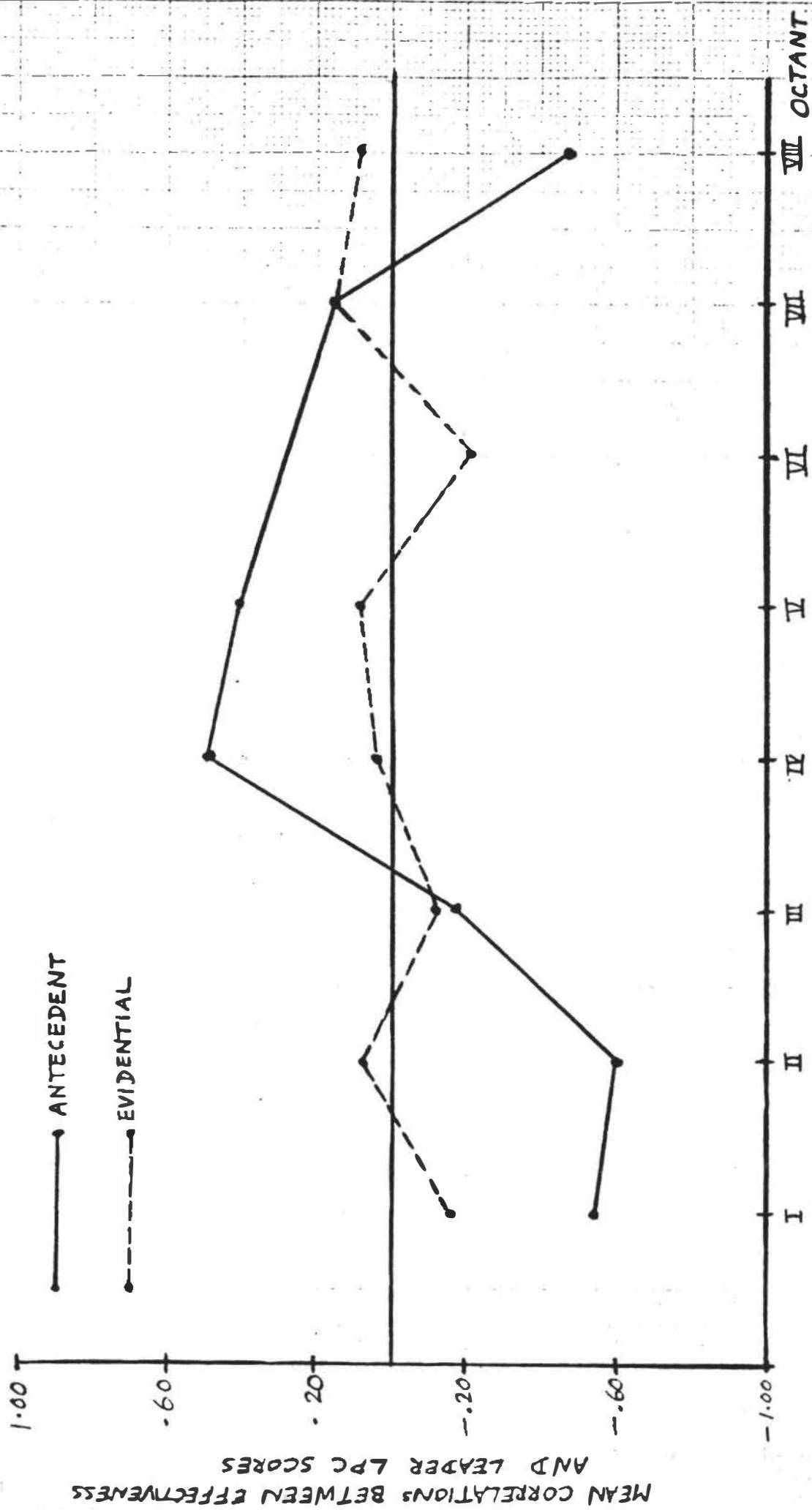


FIGURE 9. A COMPARISON OF ANTECEDENT AND EVIDENTIAL CORRELATIONS
OF THE CONTINGENCY THEORY OF LEADERSHIP EFFECTIVENESS

	Octant							
	I	II	III	IV	V	VI	VII	VIII
Johnson & Ryan (1976)	x	x	x	x				
Jacobs (1975)			x					
Dvorak (1975)			x	x			x	x
Mikols (1975)	x			x	x			x
Callarman (1973)				x	x			
Smith (1972)				x				x
Graen, et al (1970)		x				x		x

TABLE 7. Summary of Contradictory Results Found in Each Octant.

Many felt that the contingency theory lacks convincing validity in terms of predictability and generalizability. Jacobs (1975) expressed the most bitter attack on the theory. He claimed that the contingency theory was a partial theory, methodology-bound, and is in need of more efficient instrumentation. He further claimed that the theory was essentially a conservative and invariant view of leadership effectiveness. Heier and Utecht (1976) felt that there was a need for a new model or a modification of the existing theory.

In view of the above information, it has become obvious that a critical appraisal of the theory is needed. In the remaining portion of this chapter, the methodological and conceptual problems of the LPC scale, the situational favorableness continuum, measurements of

effectiveness, as well as the overall problems of the theory will be analyzed. The empirical data for the analysis come basically from secondary sources. The treatment of the data, however, is in such a way that new theoretical, conceptual, and methodological implications are pointed out.

PROBLEMS WITH THE LPC SCALE

The LPC Scale, when it was originally designed, consisted of sixteen bipolar items (Figure 6). Fox and Hill (Fox, 1976) reviewed the content of the scale and discovered that the original scale was inadequate in measuring leadership styles, and that at least eight more items should be included (Figure 10). In a more recent study, Fox developed the scale further. By eliminating five of the original items and adding thirteen new items, he developed a new scale of thirty-two items (Figure 10).

The problems with the LPC Scale are manifold. They range from the more fundamental problem of internal consistency to those of discriminant validity and interpretation.

The first problem, and perhaps the most readily demonstrable one, is the problem of internal consistency. When the split-half technique is used, the instrument yields a high level of reliability; however, when the test-retest technique is applied to the scale, it consistently yields a low reliability. The highest test-retest reliability coefficient reported by Fiedler was .70 (Mitchell, et al, 1970), indicating that at best the LPC scale has about 50 per cent reliable variance. In a



Figure 10. The Modification of the Least-Preferred Co-Worker Scale

study of military training groups with an eight-week inter-test interval (Fiedler,1967:48), the test-retest reliability coefficient was as low as .31. In another study not designed to test the LPC reliability (Pons & Fiedler,1976), Pons and Fiedler were forced to delete twenty-five per cent of the available sample because of major changes in the LPC scores of the subjects between tests. Fox conducted a series of studies of the reliability of the LPC scale (Fox,1976). Each item was individually analyzed. The mean test-retest reliability coefficient in a study of 114 Internal Revenue Service tax examiners, given the standard instrument instructions and with an inter-test period of four weeks, was found to be .75. In a study of 61 students who were asked to record the names of their LPCs privately in the first test, and then describe the same person in a retest nine weeks later, the reliability was found to be .68. In the above studies, the twenty-four-item scale was used. In a more recent study, the thirty-two-item scale was used. The subjects were eighty students given the standard LPC instrument instructions and an inter-test period of nine weeks, the reliability dropped to .66 (Table 8). The mean test-retest reliability coefficient of all the studies in the past decade is .57 (Table 9).

At least four factors should be considered as possible explanations of such low level of test-retest reliability.

The LPC score of a leader, as indicated in Chapter III, is computed by the simple arithmetic summation of the total item scores

Item Number*	IRS Study	61-Student Study	80-Student Study
1	.70	.57	
2	.45	.37	
3	.57	.68	
4	.55	.44	
5	.53	.48	
6	.70	.64	.36
7	.65	.60	.53
8	.45	.52	.54
9	.56	.63	.56
10	.53	.61	.51
11	.73	.51	.56
12	.52	.44	.49
13	.70	.59	.56
14	.64	.76	.57
15	.53	.65	.54
16	.56	.51	.65
17		.71	.59
18		.87	.70
19		.64	.56
20		.66	.45
21		.63	.40
22		.77	.70
23		.60	.46
24		.80	.60
25			.64
26			.55
27			.19
28			.45
29			.59
30			.66
31			.60
32			.45
33			.59
34			.46
35			.38
36			.49
37			.66
Mean	.75	.68	.66

TABLE 8. Test-Retest Reliability of the LPC Scale in Three Studies by Fox

(* Item Numbers correspond to the item numbers in Figure 10)

Sample & Source	Sample Size	Intertest Period	Reliability
<u>College Students</u> (Stinson & Tracy in Fox, 1976)	42	3 weeks	.80
<u>Industrial Supervisor</u> (Stinson & Tracy in Fox, 1976)	24	3 weeks	.73
<u>IRS Tax Examiners</u> (Fox, 1976)	114	4 weeks	.75
<u>Students</u> (Gruenfeld, et al, 1969)	24	5 weeks	.85
<u>Experienced Leaders</u> (Fiedler, 1967)	54	8 weeks	.57
<u>College Students</u> (Stinson & Tracy, in Fox, 1976)	30	8 weeks	.49
<u>Inexperienced Leaders</u> (Fiedler, 1967)	32	8 weeks	.47
<u>Inexperienced Nonleaders</u> (Fiedler, 1967)	62	8 weeks	.41
<u>Experienced Nonleaders</u> (Fiedler, 1967)	133	8 weeks	.31
<u>College Students</u> (Stinson & Tracy, in Fox, 1976)	104	8 weeks	.23
<u>Students</u> (Fox, 1976)	61	9 weeks	.68
<u>Students</u> (Fox, 1976)	80	9 weeks	.66
<u>Nursing Students</u> (Reilly, 1968)	14	21 weeks	.70(Rho)
<u>West Point Cadets</u> (Bons, et al, 1970)	363	130 weeks	.45

TABLE 9. Summary of Test-Retest Reliability Found by Various Studies

on the questionnaire. This method of obtaining the LPC score, in essence, offers a very unreliable basis for comparison, for it does not control item omissions. A person who skips a certain number of items would logically have a lower LPC score than a person with identical leadership style but who responds to all the items in the scale. By the same token, it is highly conceivable that an individual who has skipped a number of items in the first test responds to all items in the second test, or he could respond to all items in the first test and skip a number of items in the second test. The LPC score of this individual would therefore vary from test to test. A low reliability coefficient would be the result. If the original sixteen-item scale is used, each item score would theoretically carry one-sixteenth of the weight of the total score. Thus, the omission of a few items can cause a great difference. Such differences can decrease the reliability of the instrument. Theoretically, the mean would be a better alternative since it accounts for the omitted items. This would be especially true when the thirty-two-item scale is used since the large number of item scores would allow the mean to indicate more accurately the central tendency¹.

A second factor to be considered is the scoring behavior of the subjects. A number of variables can be at work here; for example, the intelligence of the subject, the familiarity of the subject with paper-and-pencil type of investigation, etc. Bons and Fiedler (1976)

1. Fox (1976) utilized the mean as the standard of comparisons. The low reliability coefficient reported (.66) is due to the fact that only 14 of the 32 item scores were used to compute the mean reliability.

found that those leaders who changed their LPC scores in the second test were considerably more intelligent than those who did not. We have to consider the fact that when a questionnaire is given to a subject for a second time without any adequate explanation of the purpose of the retest, it is rational for the subject to suspect the motives of the investigators. It is conceivable that some subjects might decide to respond differently just to find out what the effects would be. On the other hand, the subjects could have become familiar with the questionnaire in the retest and start to guess the expectations of the investigators. The content of the guesses he makes could be totally irrelevant, but it would effect his LPC score in the retest.

The third factor is that of history. Deutscher (1973:107) has pointed out that to use the test-retest method to determine reliability is antithetical to social science because it is based on the assumption that human thought and behavior are static. The fact that human thought is not static could be a factor that is affecting the reliability coefficient of the scale. A person who is given the LPC questionnaire in the first test probably has never even thought about who his least-preferred coworker is and what his personality characteristics are. As a result of the first test, however, he would probably be more conscious of that worker, or he would think about that coworker more during the inter-test period. These activities could influence his previous ideas of the coworker; therefore, causing a change of LPC score in the retest.

The fourth factor is that of leadership style flexibility.

Schou (1976) reported that there was considerable style flexibility exercised by superiors. He also reported that the subordinates perceived leaders changing their styles with the nature of the problem, instead of confining themselves to a limit style-response inventory which they would vary with the type of problems. It is obvious that leadership style is a highly transient phenomenon and that even controlling the variable of the types of problems, there can still be variations in leadership style within a single leader. Hill (in Fleishman & Hunt, 1973) also reported similar findings. Even though leadership style is highly flexible, the leader does not use a certain style for a certain type of problem; i.e. they did not use one style for complex problems and another for simple problems, or one style for interpersonal problems and another for technical problems. With the existing knowledge, we do not know what the determinants of leadership style flexibility are. When perceived within the context of leadership style flexibility, the low test-retest reliability of the LPC scale can be understood because of the fact that what is being measured by the LPC instrument is a transient phenomenon, rather than a durable one.

This brings us to the question as to what exactly does the LPC instrument measure? If what is measured by the LPC instrument is changing, it is apparent that we cannot pinpoint the phenomenon that is being measured.

First of all, let us examine the interpretation of the LPC score.

It was assumed that a high LPC score reflects a relation-oriented leader, due to his ability to discriminate between personality and performance; and a low LPC score reflects a task-oriented leader since he does not differentiate between personality and performance. Studies (Fiedler, 1975), however, have shown that uncertain and anxiety-arousing conditions tend to make the low LPC leaders concentrate on the task, while the high LPC leaders concentrate on their relationships with their subordinates. The opposite is the case in situations in which the leader is secure and in control. In other words, in terms of situational favorableness, a low LPC leader in Octant I (very favorable situation) will actually be relation-oriented, and a high LPC leader in Octant I will be a task-oriented leader, since Octant I will provide the leader with a secure and controlled situation!

We have been operating under the assumption that the LPC score is a reflection of the leader's personality and is independent of the actual differences between the chosen least-preferred co-workers. However, we should consider the possibility that the real personality of the least-preferred co-worker does affect the LPC score of the leader. Let us assume that the LPC instrument does measure leader behavior in terms of style. Instead of asking "what the meaning of a given LPC score is," we should ask why a certain leader chooses a particular individual as his least-preferred co-worker. Assuming that there is a real existence of relation-orientation and task-orientation, the definition of a least-preferred co-worker would be relative to the leader's orientation, and therefore is greatly affected by it.

The least-preferred co-worker of a relation-oriented leader is most likely to be a person with undersirable personality characteristics since this leader is more likely to use personality characteristics as criteria for the determination of his least-preferred co-worker. Precisely because of these criteria of determination, the relation-oriented leader would describe his least-preferred co-worker with unfavorable terms, which are actual reflections of this co-worker. Therefore, the relation-oriented leader would have a low LPC score, instead of a high one as postulated by the contingency theory! On the contrary, a task-oriented leader will very likely use performance as his criterion to determine who his least-preferred co-worker would be. In essence, to a task-oriented leader, his least-preferred co-worker is definitely one with poor performance. The personality of this co-worker, however, can be either desirable or undesirable. The task-oriented leader will, therefore, describe his least-preferred co-worker with either favorable, intermediately favorable, or unfavorable adjectives. The LPC scores of the task-oriented leaders would theoretically follow a normal distribution pattern! That is to say, using the LPC instrument to determine the existence of task-orientation of a leader is relatively irrelevant.

This analysis brings us to three important conclusions: First, the LPC instrument cannot determine whether a certain individual leader is task-oriented. It is merely a measuring device for relation-orientation. Second, a low LPC score actually reflects a relation-oriented leader instead of a task-oriented leader. Thirdly, the meaning of a high LPC

score is unknown.

The above new interpretation of the LPC scale is actually partially supported by a number of studies. For example, Bass, et al (1964), in a correlation study between ASo/LPC scores and other variables, discovered that the LPC score related positively with task-orientation, while it correlated negatively with interaction-orientation (Table 10).

	LPC	ASo
Self-orientation	.11	.11
Task-orientation	.05	.04
Interaction-orientation	-.16	-.14

TABLE 10. Correlations Between ASo/LPC Scores And Leadership Style Orientations (Derived from Bass, et al,1964).

Steiner (1959) has shown that low LPC subjects tended to be socially more expansive than high LPC subjects. Green, et al (1976) has also shown that in low-stress situations, the low LPC leaders tended to be more interpersonally-oriented. It was also found in another study (Mitchell,1969) that high LPC subjects were more cognizant of position power and task structure than were low LPC subjects in judging leadership situations, while the latter relied to a great extent on the interpersonal relationship between leaders and members. Whether this indicates that the high LPC leaders are more task-oriented is debatable, but it is obvious that the low LPC leaders are more concerned about interpersonal relations.

An underlying assumption of the LPC scale is that relation-orientation and task-orientation are two ends of a single continuum. In essence, it assumes that as a leader becomes more relation-oriented, he necessarily becomes less task-oriented, and vice versa. The problem with this assumption exists in the fact that these two orientations are not necessarily mutually exclusive. It is quite conceivable that a person place equal emphasis on both the task and interpersonal relations. In other words, a person who is concerned about "getting the job done" can at the same time be concerned about "maintaining good relationships." Task-orientation and relation-orientation can in fact be treated as two conceptually distinct but interdependent dimensions, rather than the two ends of a single continuum. The disagreement on whether task-orientation and relation-orientation are two ends of a continuum, or two independent dimensions, has been a widely recognized and debated issue. Recent studies tended to support the latter (Steers & Porter, 1975:340; Hersey & Blanchard, 1969:73). If the two styles of leadership are indeed two independent dimensions, there are at least four ideal types of leadership style we should consider: high in both dimensions, low in both dimensions, or high in one dimension and low in the other (Figure 11). This different conceptualization of leadership style can very well account for the low reliability and the questionable validity of the LPC scale. It has been suggested in the previous section that the LPC scale is more accurately a measurement of relation-orientation. Assuming the task- and relation-orientations are two independent dimensions, the LPC scale can then be considered as an instrument that measures only one of

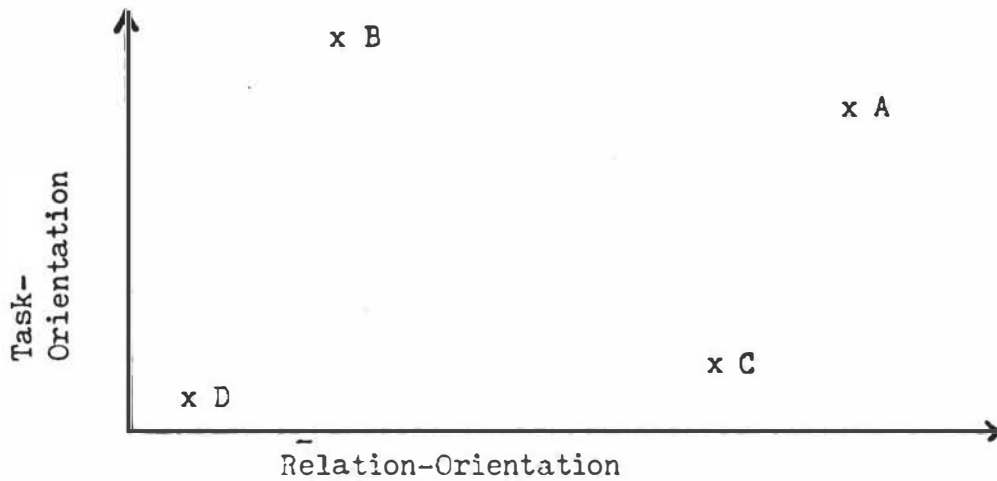


Figure 11. Task-Oriented and Relation-Oriented As Two Dimensions of Leadership Style

- * A is concerned about both relations and task
- B is task-oriented, but not concerned about relations
- C is relation-oriented, but not too concerned about the task
- D is relatively detached

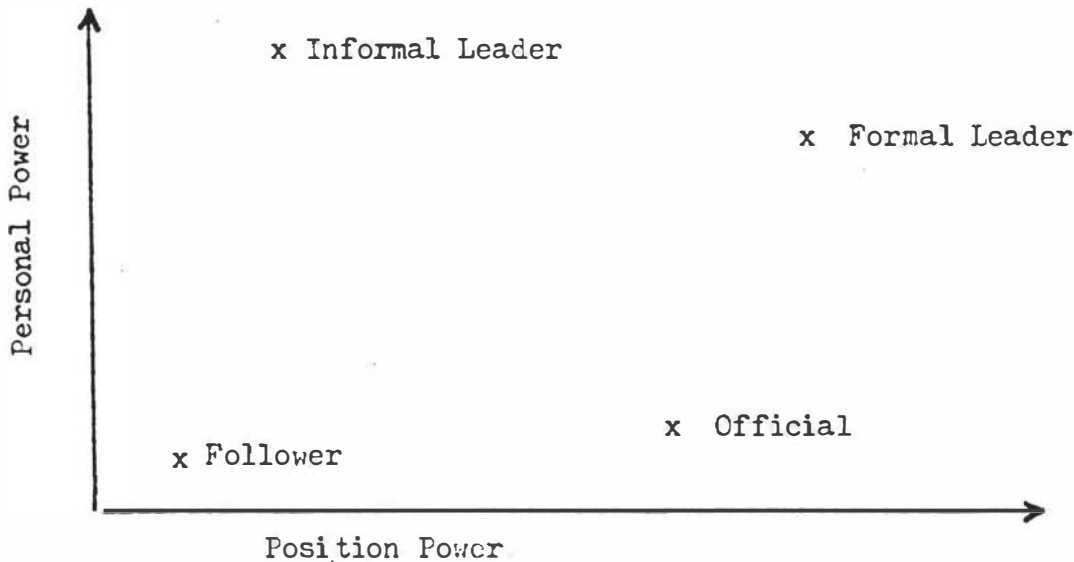


Figure 12. Etzioni's Model of Leader Power

these two dimensions. Therefore, it does not adequately reflect the real leadership style of an individual.

The above discussion of the LPC interpretation is necessary, however, only if the assumption that the LPC instrument actually measures leadership style is a valid one. The validity of this assumption has recently been seriously questioned.

Let us examine what the LPC scale as an instrument actually measures. In more recent publications, Fiedler (1972) argued that leader behavior does not correlate with the LPC score. The LPC score was actually an index of "motivational hierarchy." It is a motivational tendency of the leader to concentrate on either the task or the interpersonal relation whenever the condition is right. The problem of this new interpretation is obviously the problem of how an individual leader transfers his "motivational hierarchy index" to the group to move the group toward the goal of such motivation. We could roughly argue that for every motivation, there is a stimulation and a goal. Regardless of what the stimulations are, to move the group toward a certain goal, the leader needs to translate his "motivation" into behavior. That is to say, how can we know that a high LPC leader is motivated toward relation-orientation unless we can observe the results of this motivation? Motivation alone without behavioral consequence is quite irrelevant to organizational effectiveness. If the LPC scores merely reflect a "motivational hierarchy," the relationship between LPC scores and leadership effectiveness will be a mere chance association. This new interpretation of the LPC instrument is in need of a theoretical rationale.

Bass, et al. (1964) found that low LPC persons tended to be younger, used more extreme responses, and were narrower categorizers. These findings raises a series of questions concerning the discriminant validity of the LPC scale; Is the LPC scale an unconscious modification of the F-scale of Authoritarianism? Is the LPC scale more accurately a measurement device for human development stages?

Mitchell (1969) reported that in a series of laboratory and questionnaire studies, high LPC people were able to discriminate more finely among the behaviors of others than the low LPC subjects. The question becomes: Is this finding a mere indication of the interchangeability between the ASo score and the LPC score? Or is the LPC scale a measurement of discriminating ability? Is a person who is able to discriminate more finely a relation-oriented person?

The most shocking findings are those found by Evans and Dermer (1974). They found that low LPC scores were consistently an indicator of cognitive simplicity in that it was significantly associated with the combination of high dogmatism and high intolerance for uncertainty. High LPC scores were somewhat undefinable. A high LPC individual can be a person who is cognitively mixed (undogmatic but intolerant of uncertainty, or simply dogmatic).

It is becoming obvious that we are confronting a rather strange situation in which an instrument called the LPC scale has been developed, but this instrument is in need of interpretation of its meaning and justification of its existence. Clearly, there is no well established relationship today between LPC scores and any easily identifiable, stable

attributes. The LPC instrument is more or less existing without an operational definition.

It is becoming more and more obvious that we do not know exactly what the LPC scale does. It has been found to correlate poorly with leadership style. In other instances, it has been found to correlate significantly with other variables such as cognitive complexity. Research is needed to solve the problem of internal validity of the LPC scale in terms of its consistency and stability. Because of these problems of internal validity, the external validity of the overall theory has been affected.

We need a more feasible operational definition of the LPC instrument. If it is found to be a measurement device of leadership style, we need better definitions of task-orientation and relation-orientation.

There seems to be a more pressing need to determine if task-orientation and relation-orientation are two independent dimensions. If they are, we need to determine empirically the validity of the previous proposition that the LPC scale is a measurement of relation-orientation only.

There needs to be a more specific distinction between the motivation, the attitude, the perception, and the behavior of the leader; and there is a need to determine which one, if any, of these is being measured by the LPC scale.

Another important area that is practically untouched is the

meaning of a middle-range LPC score. If the LPC score follows a normal distribution pattern, we can expect that the majority of the scores are in the middle-range. The development of an interpretation of the middle-range LPC scores is both statistically and pragmatically more relevant than the interpretation of the high and low LPC scores since the majority of the leaders will be in this range.

PROBLEMS WITH THE SITUATIONAL VARIABLES

The variable of situational favorableness is postulated to be determined by three factors: the leader-member relations, the task structure, and the position power.

Leader-member relations can be measured by three methods: 1) the leader's rating of the group atmosphere; 2) the members' rating of the group atmosphere; and 3) the degree to which the leader is sociometrically chosen by group members. The first method has been the most frequently used method. However, Hopfe (1970) has shown that, in his study, department chairmen in universities as a group tended to consider the leader-member relations to be significantly higher than did the faculty members of their departments. Specifically, good relations were reported as much as fifty-four per cent more frequently by department chairmen. This shows that at least among the faculty members of a university there is no consensus between the leader and the members as to the exact state of the leader-member relations. If the first two methods, namely, leader's rating

and members' rating of group atmosphere, are used interchangeably, as it is implied by the fact that both methods were suggested without specifying which one is more accurate, we would expect that the results from the first method would correlate highly with the results from the second method. However, this is found not to be the case.

There also exists a problem of discriminant validity. Mitchell, et al (1970) felt that these two methods tended to yield results that would serve more accurately as indicators of group atmosphere rather than leader-member relations. This argument, at least from its face value, seems to be quite logical. When we survey the opinion of the leaders or members about the group atmosphere, in essence, we are asking the subjects to evaluate the degree of group cohesiveness. Sociometrically, a cohesive group does not necessarily imply a group with good leader-member relationship. The subordinates can form a cohesive group with the leader excluded from the clique.

The third method, namely, the sociometric method, appears to have the best face validity as a measure of leader-member relations.

The studies of contingency theory in the past have used all three methods. We can conceive a lot of problems in terms of comparability of results with this lack of consensus. First of all, two identical studies, one using leader's rating of group atmosphere as the measure of leader-member relations, and the other using members' rating of group atmosphere, can yield quite different results when the empirical reality is the same. How do we determine which study more accurately reflects the real leadership situation? Secondly, studies employing

the first two methods can be measuring something completely different from those employing the sociometric method. Not until we can demonstrate that the results from all these methods correlate significantly with each other can we use these methods interchangeably. We should restrict ourselves to using only the sociometric method in the meantime for the sake of standardization and comparability, and also because of the fact that this method has a higher face validity.

Gruenfeld, et al (1969) made a very interesting discovery. They found that high LPC leaders in general lead more cohesive groups. The cohesiveness of a group led by a low LPC leader often declines as a result of the introduction of this leader. If leader-member relations can be determined by the measurement of group atmosphere, can we infer from the above findings that the LPC instrument is a more appropriate instrument for this purpose? Or is the measurement of leader-member relations also an indirect measurement of leadership style? If the LPC score and group cohesiveness have a significant correlation, how can we separate the two into two independent variables; i.e. how can we use leader-member relations as a determinant of situational favorableness and the LPC score as a determinant of leadership style when in effect they are at least statistically closely related?

There seems to be a need for a clear-cut operational definition of leader-member relations. A commonly accepted method of measuring the variable needs to be determined. Further empirical research is needed to determine the exact interrelation, if indeed there is one, between LPC scores and leader-member relations.

Leader power defined strictly as position power can be too narrow. This definition ignores the existence of informal power. Based on Etzioni's (1955) analysis, there are at least two types of power possessed by leaders: position and personal power. A leader with both types of power is termed the formal leader. A leader with only position power is termed an official. One with only personal power is an informal leader. A person who lacks both types of power is in effect a follower (see Figure 12, pp.80). We can infer from this analysis that an informal leader would necessarily be a person who is most frequently chosen sociometrically by the group. If this is the case, are leader-member relations and position power both measurements of leader power? Are we, by using these two variables, measuring attributes of the leader rather than the situation?

In chapter III, it was pointed out that there were no samples found that could be categorized as Octant VI. This octant is characterized by low leader-member relations, high task structure, and low position power. When we place this octant into Etzioni's model, it, in effect, consists of groups in which has neither position nor personal power. In that case, the "leader" would actually be the same as a follower. May be this explains why no groups of this nature has been found in formal organizations, for leaderless groups are rare in formal organizations.

Heier and Utecht (1976) studied the application of the contingency theory in military settings by using a questionnaire method. They

accidentally discovered an interesting case distribution pattern among the various octants (Table 11). They found that forty per cent of all the cases are in Octant I, 8.5 per cent in Octant III, 32 per cent in Octant V, and 8.3 per cent in Octant VII. The percentage distribution in the rest of the octants are all below 3.6. Octants I, III, V, and VII accounted for 88.8 per cent of all group situations! If we examine each of these four octants carefully, we will see that they all have one thing in common - high position power. This strange pattern of case distribution challenges the supposition that position power is a situational variable. It is possible that this distribution pattern is generalizable to all formal organizations. It is rare to find a person in a position of leadership in a formal organization who does not have some formal or institutionalized power in terms of imposing sanctions. If this is the case in most organizations, position power can be perceived more as a constant rather than a variable. That is to say, position power is relatively high in all formal organizations in terms of the leaders' authority to carry out punishments and rewards.

Research in the future needs to determine whether the findings of Heier and Utecht are only true in military settings or if the strange case distribution pattern is universal in all formal organizations. If it is found to be a common phenomenon, position power should be eliminated as a variable of situational favorableness in formal organizations.

Octant	Number of Cases	Percentage
I	1031	40.0
II	93	3.6
III	218	8.5
IV	50	1.9
V	824	32.0
VI	84	3.3
VII	214	8.3
VIII	60	2.3
Total	2574	99.9

TABLE 11. The Case Distribution Pattern Among Octants Discovered By Heier And Utecht (1976)

Let us examine the case distribution pattern among the octants discovered by Heier and Utecht further (Table 11). While Octants I, III, V, and VII account for 88.8 per cent of all cases, Octants I and V alone account for 72 per cent and Octants III and VII account for only 16.8 per cent of the total number of cases. To put it in a different way, of all the cases in Octants I, III, V, and VII, 81 per cent of these are in Octants I and V. If we examine Octants I and V closely, we can see that other than high position power, they both have high task structure. As for Octants III and VII, while they both have high position power, they both have low task structure. If we single out the variable of task structure, we could see that the number of cases with high task structure as compared to those with low task structure within these four octants have a ratio of

4.3 to 1. We can logically infer from this that task structure can prove not to be a situational variable in formal organizations. This inference can be further supported by an examination of the number of cases in Octants IV and VIII -- the only two situations in which both position power and task structure are low. Octant IV represents only 1.9 per cent of the total number of cases, while Octant VIII represents only 2.3 per cent -- the lowest two percentages among all octants and adding to a total of only 3.2 per cent between the two! If these figures tell us anything at all, it is the possibility that task structure is a constant, i.e. constantly structured, in a formal organization.

Again, further research is needed to determine the generalizability of this distribution pattern. If this pattern is found to be common in formal organizations, we still need to determine if this pattern is ideologically and culturally determined. Historically, formal organizations have been greatly influenced by Taylorism, i.e. the scientific management approach established by Taylor, in this country. We need to find out if an organization that does not follow the model of Taylorism also has high position power and task structure.

In both field and laboratory studies of the contingency theory in the past, the number of cases per octant was usually quite small (except in studies in which the survey method was used). This was due to practical reasons such as the availability of subjects and financial feasibility. Let us use an experimental setting, for

instance. For each datum obtained, there needs to be at least three subjects because we need at least three subjects to form a group and there is only one leader per group. In other words, in this hypothetical experiment, only the data from one third of the available subjects are significant to the study. Because of this limitation, most studies have used the criterion of being in the hypothesized direction. Based on a null hypothesis of a zero correlation, this results in an alpha level of .50 for tests of hypotheses. It is therefore necessary to create the entire sampling distribution of correlation in an octant before the null hypothesis can be rejected. It is therefore quite questionable as to whether all the results reported by previous studies were reliable.

Foa, et al (1970) suggested that the dimensions of situational favorableness were actually situation complexity dimensions. Octants I and VIII are simpler than the rest of the situations in that the three variables within these two octants are either all high or all low. Combining this suggestion with Evans and Derrmers' (1974) findings that low LPC leaders are cognitively more simple, we can explain why the low LPC leaders are more effective in extreme situations (simpler), while high LPC leaders are effective in intermediate situations (more complex).

The dimension of situational favorableness is determined by the arrangements of the three variables in terms of their relative contribution to the favorableness of the situation. The relative importance of each variable, however, has not been empirically established.

For instance, that position power is less important than task structure could be relative to the organization. We could argue that a strong position power in a criminal organization is more favorable to the leader than a highly structured task. Empirical research in the future needs to validate the arrangements of these three variables.

Given all the instruments of measuring situational favorableness, there is still the more practical problem of how a leader diagnoses a situation. The pragmatic value of the contingency theory is that it allows an organization to improve leadership effectiveness by matching the right leaders to the right situations. However, situations can fluctuate quite frequently and quite suddenly. How does a leader or an organization detect this change without constantly measuring the situational favorableness with the available but rather inconvenient instruments?

The sources of the problems of the situational variables are plentiful. Some held a more pessimistic view that leadership effectiveness as contingent upon situation was no more readily demonstrable than the proposition "leaders have certain traits in common." It is at least equally difficult to specify relevant situational variables (Gouldner, 1950:37). Others held a more optimistic view. They felt that the problems with situational variables arose from the relatively short period of time that this variable had been studied, and also from the lack of a plausible theoretical guideline that could help to clearly define dimensions that are to be investigated (Burke, 1963).

The dimensions of situational favorableness, when it was developed in 1963, represented the most sophisticated and complete treatment of the situation that could be found during that period of time. Perhaps now is the time for the refinement of the instruments.

PROBLEMS WITH THE MEASUREMENT OF EFFECTIVENESS

There has never been a standard set of criteria for the measurement of effectiveness in the contingency theory. Performance and follower satisfaction are frequently used as the two most important criteria to determine effectiveness. However, performance has been measured in terms of productivity in some instances, efficiency in others, and profitability in still others. Satisfaction has been measured sometimes in terms of absence of strain, other times in terms of group cohesiveness, and still others in terms of communication. This problem has its source in the nature of human organizations. Different organizations have different goals and different structures. It is rather difficult to set a standard of accomplishments or follower satisfaction that is applicable to all organizations. To further complicate the problem, for some organizations, performance, for instance, can adequately be measured by the quantity of production; for others, the quality of production.

It is questionable as to whether we can actually measure leadership effectiveness in terms of performance outside of an experimental group. For instance, in Fiedler's (1967) study of basketball teams, the percentage of games won by the team was used as the criterion to

evaluate performance. This represents an oversimplification. First of all, it assumes that the combined quality of the opponents of each team in the study are roughly equivalent to each other. But if team A has a higher percentage of stronger teams as opponents, the percentage of games won by team A would probably be lower than that of team B. This percentage, however, is by no means an indication that team A is a poorer performer. Secondly, it assumes a type of initial uniformity between the two teams: i.e. it assumes that the quality of the members of team A and team B prior to the influence of the leaders are relatively equivalent. Under this assumption, performance relies solely on the leadership quality. This assumption is, however, invalid. A superior team A with a leader that does not match the situation can still perform as well as, or even better than, an inferior team B with a leader that matches the situation. One could argue that instead of using the percentage of games won, we should use the percentage increment of games won as the criterion. This again is debatable. For using this latter criterion, we are assuming that improvement of team performance is a linear progression, when it could be curvilinear. Figure 13 is a graphic representation of the percentage increments of games won by two hypothetical teams. If we measure performance at time T, team B has a better increment than team A, whereas in the long-run, team A is by far the better performer of the two.

To further complicate the issue, there are some conceptually confusing criteria used to measure leadership effectiveness. For

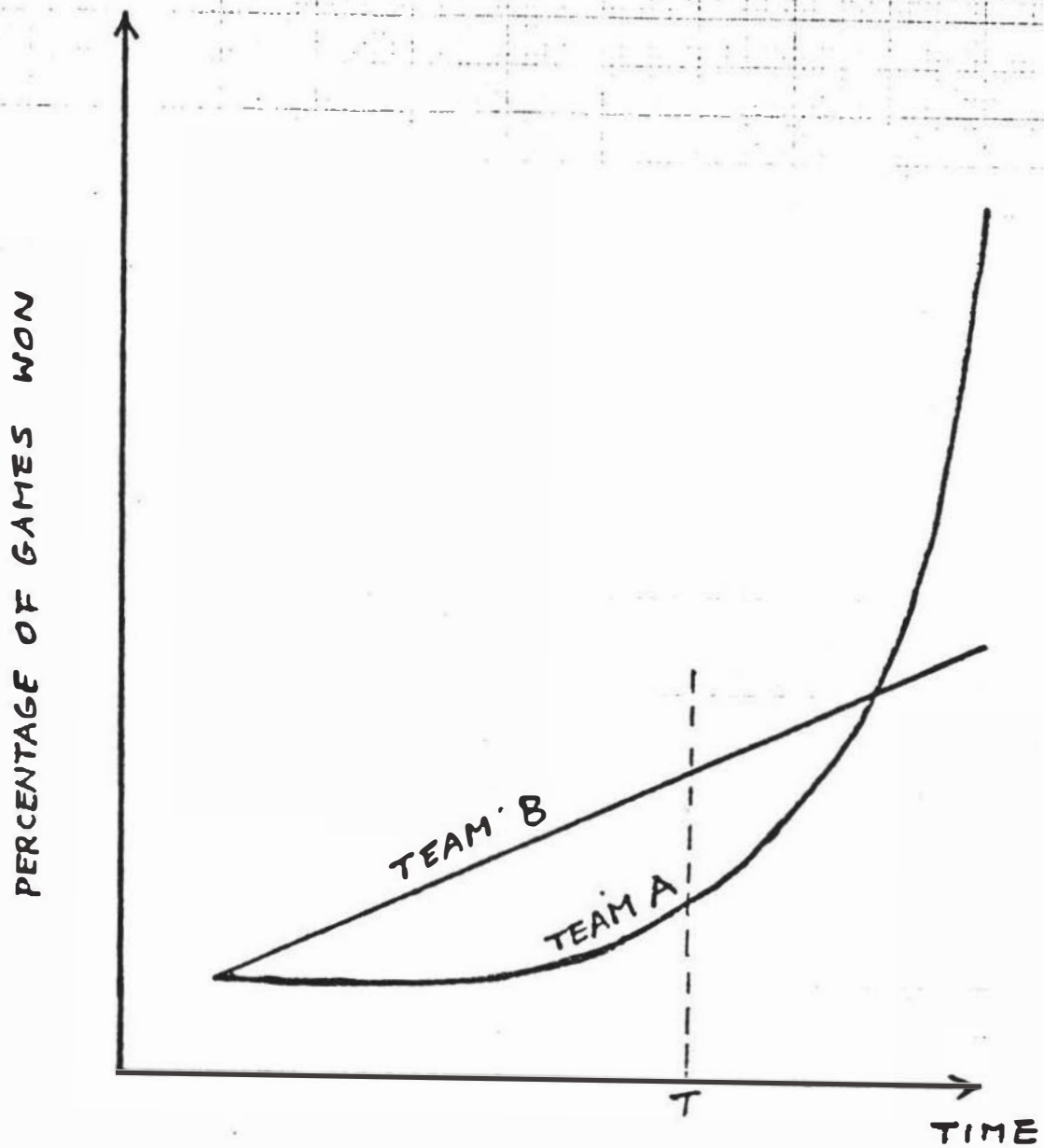


FIGURE 13. INCREMENTS OF PERCENTAGE GAMES WON
BY TWO HYPOTHETICAL TEAMS

example, group cohesiveness is used as a criterion of effectiveness, yet it is used also as a determinant of situational favorableness (leader-member relations measured in terms of group atmosphere) and a criterion to define leadership style (a relation-oriented leader is one that creates a cohesive group). The problem with using cohesiveness as a means of identifying leadership style, of course, lies in the fact that when leadership style is defined in terms of a covert motivation instead of overt behavior, the consequences of the motivation is the only means of identifying the motivation. Nonetheless, using cohesiveness as an attribute in both independent variables and the dependent variable not only confuses the issue, but is also methodologically unjustifiable. In terms of its logic-in-use, no study has actually used cohesiveness as a criterion in both the dependent and the independent variables at the same time. This occurs when we compare one study with another. There needs to be a consensus as to the exact use of these attributes.

There also needs to be a consensus on the set of criteria to be used in comparable organizations. This could prove to be a monumental task due to the great variety of organizational types, yet this task is indispensable for the sake of comparability.

SOME BASIC PROBLEMS WITH THE OVERALL THEORY

Figure 5 (pp.50) represents the basic theory. LPC scores were found to correlate negatively with effectiveness in the extreme octants, and positively with effectiveness in the intermediate octants. However,

if we examine the data closely, we will find that the number of cases per octant is quite small and the standard deviation quite large. For example, Octant III claims to have a predictive correlation coefficient of $-.33$. This figure only represents a median value. The actual range of correlation coefficients in Octant III are between $-.72$ and $.84$! It is questionable whether the predictive correlation of $-.33$ is a reliable figure due to the small number of samples and the large range. Octant II, for instance, has only three correlation coefficients as data. Such a small amount of data can hardly justify the theory's predictability. Numerous replication studies have been done and a great many of them proved to have contradictory results. The question remains whether such a relationship as postulated by the theory is statistically justifiable. Instead of conducting an ambitious study of multi-octants, we should conduct a large number of studies per octant simultaneously and establish a more reliable correlation index per octant.

The contingency theory has also been too hasty in claiming a wide range generalizability. One important aspect that has been neglected is the level of organization. The theory needs to further distinguish between large-scale organizations and groups. It is true that due to the span of control, most large-scale organizations are broken down into small groups, but can we assume that the small groups within a complex organization are essentially the same as an independent group? From the existing sociological knowledge, we realize that a small group is characterized by Gemeinschaft relationships,

while a large organization is characterized by Gesellschaft relationships. It is doubtful whether the contingency theory is applicable across these two types of interpersonal relationships. Perhaps a distinction between groups within complex organizations and independent groups could refine the theory further and improve its external validity.

One of the more fundamental problems as shown in the previous analysis of the variables is that of operationalization. It lies in the basic question: how can one be sure that, after operationalization, the new definition reflects what is to be measured? We found this problem in the LPC scale and the variable of leader-member relations. Originally the leadership style as a variable was operationalized in terms of the LPC score. Later, it was found that the LPC score was more appropriately perceived as an operationalization of "motivational hierarchy." It was again found to be a measurement of cognitive complexity. We can see here that the theory has changed not for conceptual reasons, but to salvage an operational definition. It seems to be more logical to develop an alternative operationalization of leadership style than to drop the variable of leadership style because of the instrument. This is not to say that we should abandon the LPC scale, but to incorporate it into the theory with the full recognition that it does not measure leadership style. Similar problems were found in the operationalization of the leader-member relations. This variable was originally operationalized in terms of group

atmosphere. Group atmosphere was later determined to be unrelated to leader-member relations. These problems of operationalization of variables in future developments of the theory can be avoided by a clearer distinction between various concepts such as attitude as distinguished from perceptions, behavior, and motivation.

Attention should also be paid to the possibility of the existence of systematic bias, for a consistent correlation between leadership style and LFC score could be caused by a third variable such as authoritarianism.

Studies of the contingency theory have also concentrated on only a certain segment of the population. For example, students, military, businessmen, hospital personnel, and school teachers have been too heavily researched; while other types of leaders such as politicians, leaders of labor organizations, leaders of organized crime, and leaders of street gangs have been generally neglected. This is due to various practical aspects. Researcher have to consider the researchability of the groups in terms of availability of samples and measurability of variables. There are also the problems of availability of research funds and the threat to the personal safety of the researcher, especially in the study of criminal leaders. The author can pose no solution to this problem, other than calling for caution when the contingency theory is generalized to the less frequently researched organizations or groups.

There is also a lack of comparative studies. Most studies done

were based on a single organization or type of organizations. Cross-cultural studies are also needed to determine if the contingency theory is ideological- and cultural-bound.

Practically no longitudinal studies have been done to determine the effects of temporal factors on the validity of the theory. This type of study is greatly needed to determine how organizational change, familiarity between leader and followers, experience, and seniority would affect the outcomes of the theory over time.

CHAPTER V

SUMMARY AND DISCUSSIONS

Overall, we found the contingency theory rather ambiguous, and with questionable instrumental reliability and generalizability. In terms of methodology, we found the theory rather limited to a certain method and a certain type of samples. The variables need to be better operationalized.

We should consider the alternative interpretation that a low LPC score reflects a relation-oriented leader rather than a task-oriented leader, and that a high LPC score is undefined.

Perhaps we should consider an end to reliance on the LPC scale to measure leadership style, and seek to construct an alternative instrument. It is also quite possible that we need to construct two instruments for leadership style -- one to measure relation-orientation, another to measure task-orientation.

We should restrict ourselves to measuring leader-follower relations by applying only the sociometric method. There is also the possibility that leader-member relations and position power are actually two variables of power -- position and personal. More research is needed to determine if position power and task structure are situational variables.

We also need to determine the appropriate arrangements of the three

situational variables in terms of favorableness by empirical studies.

There needs to be a consensus of the criteria of effectiveness. Groups within complex organizations should be distinguished from independent groups.

Why does the contingency theory encounter so many difficulties? Is it because of what some scientists claim to be the irreducibility of human experience to cause-effect sequence? Or is it the very nature of a multiple determination theory of causation? Are the difficulties we are encountering the so-called insurmountable difficulties of detecting spurious factors and establishing clearly time-sequence of the variables involved?

Merton (1959) has identified five reasons for the initiation of the "problem-finding" process. Conceptual obstacles and inconsistencies are two of these occasions. Perhaps it is time that we should reconsider the basic concepts of leadership and leadership situations.

Maybe we should consider other variables such as time and follower characteristics. A number of variables have been identified as relating to leadership and leadership effectiveness (Table 12).

Leader experience was found to be a significant factor that could affect the overall effectiveness (Fiedler, 1976). The same situation was found to be less favorable for the inexperienced than for the experienced leader.

Another study by Goldman and Fraas (1965) discovered that followers were far more willing to accept a leader who was elected by group vote

LEADER

Background
Physical characteristics
Personality
Behavior
Status
Responsibility
Power
Expectation
Values
Norm conformity
Reference Group identity
Experience
LPC score
Expertize and competence

SITUATION

Group Size
Group structure
Group composition
Homogeneity
Task structure
Time for task
Competitiveness
Task interdependence
Time-span of discretion
Position power
Leader-member relations
Authority immediately above the leader
Leader selection pattern

FOLLOWERS

Mean LPC score
Maturity
Supportiveness
Performance
Expectation
Education
Ability to take responsibility
Experience

TABLE 12. Variables That Have Been Identified As Related To Leadership Effectiveness

or selected according to ability to perform the group task, than one who has been arbitrarily selected by the authority. The leader selection pattern can prove to be another significant variable.

Many other situational variables have been identified. The cooperative requirements of the task could affect the relative importance of task- or relation-oriented behavior of the leader. For example, Van De Ven, et al (1976), applying Thompson's hierarchy of task interdependence (see Appendix) found that in a team work or a reciprocal model, democratic communication mode seemed to be more widely used, while in an independent or sequential model, an autocratic communication mode is more frequently used. Maybe task interrelatedness is one important aspect that should not be ignored.

Wearing and Doyle (1974) found that the low LPC leaders performed better in a competitive environment than high LPC leaders. Medalia (1954) found that a leader could influence follower perceptions of the leader by simply manipulating the size of the group.

Gruenfeld, et al (1969) discovered that the supportiveness of the group to the leader can greatly influence the leader's behavior. Moore (1975) found that follower maturity basing on Argyris' (1964) concept of follower self-actualization, and the ability of the followers to task responsibility, the education of the followers, the experience of the followers were all determinants of leader behavior. Curran (1975) found that instead of leader behavior influencing group performance, the opposite was the case. Follower LPC could also prove to be an important variable.

Time-span of discretion is defined as the longest period which can elapse in a role before the manager can be sure that his subordinates have not been exercising marginally substandard discretion continuously in balancing the pace and the quality of his work. Muller (1970) found that a long time-span of discretion tended to produce low LFC leaders, a high task structure, and better performance.

All these are indicative of one fact: more and more situational, leader, and follower characteristics are found to be interrelated and related to effectiveness. A series of questions should be asked as to what all these mean. Was Gouldner (1950) correct when he claimed that the study of situation can be no more fruitful than the study of leadership traits? Are we in effect following the same path as that set by researchers of the Great Man Theory? Would this continuous and everlasting effort of uncovering new situational, as well as follower and leader variables eventually lead us to a long and inclusive list of variables that practically discriminates against no organizations? Is the whole history of the study of leadership a gigantic "semantic merry-go-round"?

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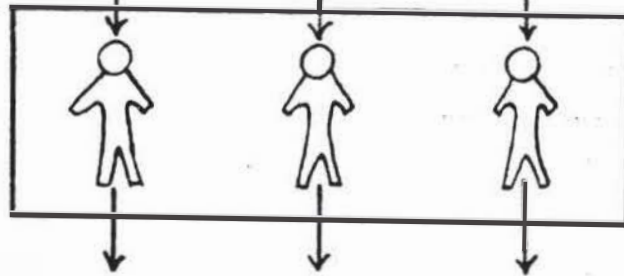
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APPENDIX

INDEPENDENT

UNIT

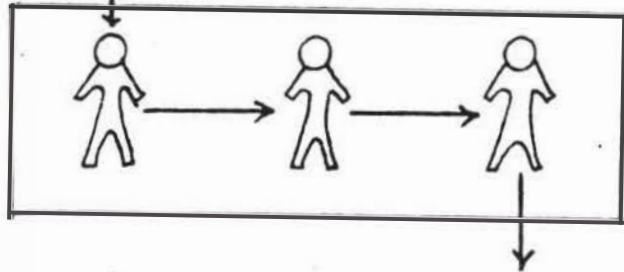
WORK FLOW



INDEPENDENT MODEL

UNIT

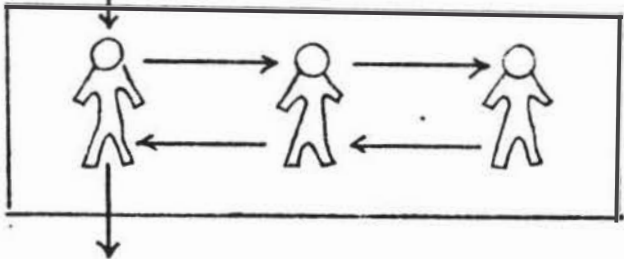
WORK FLOW



SEQUENTIAL MODEL

UNIT

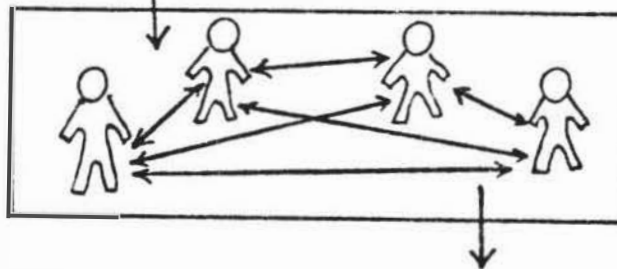
WORK FLOW



RECIPROCAL MODEL

UNIT

WORK FLOW



TEAM WORK MODEL

INTERDEPENDENT

THOMPSON'S MODEL OF TASK INTERDEPENDENCE