

TOWARD A SYNTHESIS OF LEADERSHIP
STYLE THEORY: AN EXERCISE
IN THEORY CONSTRUCTION

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TABLE OF CONTENTS

Chapter	Page
I. STATEMENT OF THE PROBLEM	1
II. REVIEW OF LITERATURE	3
Leadership Theory	3
Theory Construction	11
III. METHOD	18
IV. ANALYSIS AND THEORY CONSTRUCTION	23
The Discovery of General Variables in the Literature	23
The Specification of the Definitions of the Discovered General Variables	45
The Construction of Theoretical Statements	55
The Ordering of the Theoretical Statements	64
Chapter Summary	69
V. FINAL OBSERVATIONS	72
Review of the Problem	72
Observations and Evaluation of Hage's Methods of Theory Construction	74
Effects of Hage's Methods of Theory Construction on Leadership Style	77
Recommendations for Further Research	80
Conclusion	81
SELECTED BIBLIOGRAPHY	84
APPENDIX	89

LIST OF TABLES

Table	Page
I. Factors Empirically Associated with Leader Needs Manifestation	29
II. Categories of Factors Associated with Leader Needs Manifestation	31
III. Functions of Leader Needs Manifestation	33
IV. Definitional Reduction of Leadership Factors in <u>Expertise</u> Category	38
V. The Definitional Process of the Factors Associated with Leader Needs Manifestation	48
VI. Categories of General Variables Associated with Leader Needs Manifestation	53
VII. Strategies as Functions of People or Task Emphasis	54
VIII. Major Theoretical Statements	57
IX. Derived Corollaries	62
X. Statements and Corollaries for which Direction is Predicted	68

FIGURE

1. Model of Leadership Style	26
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CHAPTER I

STATEMENT OF THE PROBLEM

Hage (1980), an observer, student, and researcher in the field of organizational theory, has noted the great amount and variety of new concepts and attendant research studies in the field over the last two decades, but also points out the pervasiveness of the inconsistencies and contradictory findings in the literature. Concepts with the same name, for example, have different measures, while other concepts with different labels have the same indicators.

The branch of organizational research known as leadership theory is not exempted from the deficiencies noted by Hage. This study is addressed specifically to one concept of leadership theory in particular, that of leadership style. However, the lack of precision pervading this one concept is symptomatic of the theory as a whole.

Hage (1972) has developed a method of theory analysis and construction that has been demonstrated to be useful in alleviating the perceptual problems found in organizational literature. It is a method that synthesi-

zes concepts, crystallizes definitions, creates and orders hypotheses and links all together in coherent and measurable form. Hage (1980) has shown the effectiveness of the method by utilizing it to analyze the research in organizational theory over the last 20 years, and to formulate an overall theory of organizations as a result of that analysis.

Hage's (1980) recent work, dealing predominantly as it does with organizational theory at the meso or operations level of analysis, only mentions leadership theory as it relates to the concept of power. Existing leadership theory and literature are primarily at the micro or social position level of analysis, however, and the need of synthesis and crystallization is apparent. Furthermore, it would appear that Hage's method of theory analysis and construction would work equally well with leadership style theory as it has to the other elements of organizational theory to which it has been applied.

The purposes, then, of this paper are the following:

1. Review the literature of leadership style.
2. Apply appropriate techniques from Hage's method of theory analysis and construction to the research in leadership style in order to develop the beginnings of a consistent, cohesive, and measurable theory.
3. Suggest an agenda for further research in the field.

CHAPTER II

REVIEW OF LITERATURE

Leadership Theory

Aristotle's (1974) assertion that leaders are born, not made, guided leadership researchers for decades. A great number of attempts were made to identify character traits common to effective leaders. This traitist focus was thoroughly modified by a literature review done by Stogdill (1948), which summarized the traitist studies. Although traits describing ability, achievement, responsibility, sociability, and status tended to differentiate leaders from followers, those that predicted successful performance differed according to the situation.

The emergence of situation as a factor of leadership led to Hemphill's (1949a) finding that group viscosity or cohesiveness and hedonic tone or satisfaction correlated positively with leader effectiveness. As leader behavior was examined more closely, patterns began to emerge which differed according to the situation. Hemphill (1949b) isolated two dimensions of leader behavior, emphasis on the task at hand, labeled initiating structure; and emphasis on leader-member relationships,

named consideration.

The Ohio State studies (Hemphill, Stogdill, et al.) view the leadership dimensions as separate scales rather than as opposite ends of the same continuum. A given leader, then, can theoretically be high or low in both dimensions of leader behavior, or he may be high in either and low in the other. In addition, different combinations of the leadership dimensions were shown to be effective depending on the situation (Halpin, 1966).

In what he calls the contingency model of leadership effectiveness, Fiedler (1967) views the leadership dimensions from a psychological perspective, and uses the word style (rather than behavior) when referring to them. Style is seen by Fiedler (1967, p. 36) as "the underlying need-structure of the individual which motivates his behavior in various leadership situations." The behaviors as conceptualized in the Ohio State studies become but outward manifestations of a person's need structure or style. According to Fiedler's (1967) theory, persons in a leadership role feel success in terms of the accomplishment of the task or as good leader-member relationships, not both. Therefore their leadership style will be either task or relationships oriented, depending on their need structure. People are effective leaders contingent (hence contingency theory) upon their being placed in situations compatible with their style or need structure. Fiedler (1967) concedes that leaders can and will

exhibit behavior outside their psychological needs structure, but this will not occur consistently nor during periods of stress. In addition to the foregoing, Fiedler operationalized the concept of situation for the first time, and theorized that a leader's style (need for relationships or task accomplishment) was more or less effective depending on the situation.

In the Three Dimensional Theory of Managerial Effectiveness, Reddin (1970) contributes the operationalization of a third dimension, effectiveness, to leadership theory, thereby providing a means of evaluating the appropriateness of specific styles (Reddin's term), or behaviors, in given situations. In the view of Reddin, leader effectiveness would be enhanced by training the leader to accurately diagnose situations and to apply the appropriate style to each situation encountered. An underlying assumption of this theory is that a leader is indeed able to alter his or her style. This assumption is recognized by Reddin and is labeled style flex.

Hersey and Blanchard (1972), building upon Reddin's observations, developed the Situational Leadership Theory. Its premise is essentially the same as Reddin's, that a leader's effectiveness increases to the extent that he or she learns to correctly assess encountered situations and to apply appropriate leadership styles to them. The authors recognized that the degree of style flexibility (their term is style adaptability) might vary among

individuals just as style itself does, so they developed an instrument to measure a person's style and style adaptability, called the Leader Effectiveness and Adaptability Description, both self-perceived (LEAD-self) and perceived by others (LEAD-others). Situational Leadership Theory postulates, then, that a person can enhance his or her leadership effectiveness by realizing which leadership style(s) is presently being used, learning to adopt any that may be beyond his or her present repertoire, correctly diagnosing encountered situations, and applying the appropriate style to those situations.

Blake and Mouton (1978) play the role of antagonist in leadership theory. They perceive the leadership dimensions as in the Ohio State studies, as two separate continua. They have graphed this idea, with one dimension, termed by these authors concern for people, as the vertical axis, and the other, concern for production, as the horizontal. Each axis is numbered from one to nine, and from those numbers a grid is developed, each square representing a potential managerial style (their term) with corresponding amounts of production and people concern. The authors' explanation emphasizes the corners and the middle of the grid, 1-9 representing low concern for production and high concern for people, 9-9 representing high concern for both dimensions, 9-1 showing high production but low people concern, 1-1 showing little concern for either, and 5-5 indicating a middle-of-the

road balance between the two. The 9-9 style, high concern for both people and production, is, according to the authors, the ideal no matter what the situation. With this view all the efforts to conceptualize and diagnose the situation would be superfluous as far as leadership style is concerned. High concern for people and production simultaneously will always be the appropriate leadership style, at any time, in any situation, or under any conceivable set of circumstances.

This brief overview of leadership theory illustrates the major issues and trends. Now the reader's attention is directed to the focus of this paper, leadership style, and to a review of the literature pertaining thereto.

Leader traits have been associated with leadership style. Batlis and Green (1979) found that several measures of personality attributes were associated with leadership style: tough-mindedness, practicality, conservativeness, group-dependency, tender-mindedness, imaginativeness, experimentation, and self-sufficiency. Haggerty (1979) found machiavellianism to be associated with leadership style. Hogan (1978) associated the traits of dominance, self-acceptance, and communality with leadership style. To Hoy and Rees (1974), leadership style was associated with authoritarianism, emotional detachment, and hierarchical independence, the latter being a term derived from Blau and Scott (1962). Wennergren (1971) associated the traits of administrative

achievement, democratic orientation, intelligence, conscientiousness, warmheartedness, being relaxed, and assertiveness with leadership style.

Other factors associated in the literature with leadership style seemed to be more like tasks, abilities, and qualities associated with experience. These factors can roughly be categorized as leader expertise. Anderson (1980) associated decision-making, ability to withstand threat of danger to self and comrades, and ability to prepare subordinates for consequences with leadership style. Bivona (1980) points to a connection between cognitive style and leadership style. Mechanical ability is the factor that Cummings (1970) associates with style. Doyle (1971) relates achieved status to style, Fiedler (1972) does the same with experience, as do both Fralish (1977) and Mitchell (1970) with cognitive complexity. House, Filley and Gujarati (1971) associate technical competence, decisiveness, and hierarchical influence to leadership style. Johnson (1976) relates positive self-concept to style. Schriesheim (1978) lists five leadership aspects: role clarification, specification of procedures, work assignment, support, and expectancy. Determinants of style according to Shapira (1976) are locus of information and locus of power. Silver (1975) found that conceptual complexity is related to style. Finally, Stogdill's (1959) factors of leadership are specified as initiation of structure, consideration,

representation, demand reconciliation, tolerance of uncertainty, persuasiveness, tolerance of freedom of action, role assumption, production emphasis, predictive accuracy, integration, and influence with supervisors.

Another grouping of factors associated in the literature with leadership style could be labeled its dimensions, or perhaps functions. Ballard (1978) describes style with the terms autocratic and democratic. Blake and Mouton (1978) use the phrases concern for people and concern for task. Support, goal emphasis, work facilitation, and interaction facilitation are what Bowers and Seashore (1966) use to describe leadership style. Carnie (1979) speaks in terms of participative style. Chemers and Skrzypek (1972) use the phrases relationships motivation and task motivation. Dansereau's (1975) style divisions are exchange and supervision. Both Fields (1980) and Kaufman (1979) talk about participatory style. Jago and Vroom (1977) use the term autocratic when describing style, and provide the concept of hierarchical level to the expertise category of style. Lord (1977) describes style in terms of exchange behavior, task related and socioemotionally related. Misumi and Seki (1971) write about performance and maintenance leadership styles. Perkins (1971) speaks of style as need for achievement, need for power, and need for affiliation. People orientation and task orientation are Reddin's (1970) terms. Reese (1973) speaks of supportive relationships, group

decision-making and supervision, and high goal orientation. Instrumental and expressive are Rossel's (1970) descriptions of leadership style. It appears that many, if not most, of the style descriptions in this category can be divided into people and task emphasis.

As can be seen by the myriad of factors associated with or used to describe leadership style, there remains much to be done by way of consolidation and synthesis toward providing a consistent and concise conceptualization of leadership style.

There is also discontinuity of definition regarding leadership style. When referring to what most researchers call style, the Ohio State studies use the term behavior. Fiedler, Reddin, Hersey and Blanchard, and Blake and Mouton all use the word style when referring to roughly the same phenomenon. The Ohio State studies seem to be viewing behavior according to its conceptual or dictionary definition as comportment in response to a social stimulus (i.e., a leadership situation), but style seems to carry differing connotations depending on the theorist. Fiedler (1967) is referring to an underlying psychological needs structure when using the word "style." Hersey and Blanchard (1972), on the other hand, refer specifically to observed behavior when employing the same word. Reddin (1970) does not provide a definition of style as such, but uses the word orientation when describing style. Blake and Mouton (1978) employ the term concern

IV
X

when explaining style.

One distinction that has been implicitly made in the literature is that between style as need and style as behavior. Measures of a leader's psychological needs other than Fiedler's Least Preferred Co-Worker scale have also been demonstrated to predict behavior (style is the term used by the researchers). Perkins (1971) found that leader need for achievement predicted a high consideration -- high initiating structure style, need for power indicated high initiating structure only, and need for affiliation correlated positively with high consideration.

Theory Construction

Faisal (1977) points to Durkheim's (1950) The Rules of Sociological Method, written in 1894, as among the first attempts to construct social science theory. Durkheim's method consisted of 1) defining the phenomenon in question in terms of its external features, 2) systematic refutation of inadequate explanations, and 3) proposing his own explanation.

The methods which Weber (1949) developed to formulate ideas and theories, Verstehen (interpretive understanding) and Ideal Type (a form of comparative analysis), constitute another early example of theory construction.

Talcott Parsons (1937), more recently, made some important observations regarding the construction of

social theory. To Parsons, theory development is an evolutionary process. The building of a system of abstract, interrelated concepts is the first step, subject to constant revision as new observations are made.

Parsons contends that theoretical statements should only be made after the concepts have been formulated into an observable system and have been subject to revision over time. Care should be exercised, according to Parsons, that the derived statements not include assumptions that cannot be derived or implied from the concept system in question.

It is, however, difficult to separate the above approaches to theory development from the actual social theories espoused by their authors. Theory construction as an endeavor separate from a specific research area is relatively new. Kuhn (1962) set the stage by discussing paradigms, which he viewed as new conceptualizations of phenomena that explain what has heretofore been left unexplained, which in turn lead to new research strategy and resulting new problems for solution. He refers to this process as a "scientific revolution," a heretofore unrecognized source of new theoretical statements.

Zetterberg's (1963) text can be said to be the first on theory construction itself. It delineates the issues and areas for consideration in this subfield of social science. He points to a theory-research dichotomy

and argues for integration and harmony between the two emphases. The theory construction process is broken down into various components:

1. Conceptualization and the process of definition.
2. Relating concepts to one another to form propositions. Propositions are then subdivided into components of determinants and results.
3. Ordering propositions and linking them into sets from which measurable hypotheses can be derived.
4. Verification and measurement. Here Zetterberg emphasizes the importance of structuring the measurement to fit the hypothesis.

The format of Zetterberg's text has influenced most subsequent theory construction literature.

Blalock (1968) picks up the measurement issue where Zetterberg leaves it and emphasizes the desirability of using mathematical principles as the underlying patterns of social theory construction. His approach is largely one of detailed methodology suggested by the mathematical perspective.

Stinchcombe (1968) approaches theory construction from a variety of perspectives, then applies this perspectival variety to concrete fields of social analysis. Specifically, he discusses theory building from demographic, functional, and historicist points of view, demonstrating that differing perspectives affect the nature of the theories developed. These observations are then

applied to the conceptualization of power phenomena, environmental effects, and the structure of activities.

Dubin (1969) essentially follows the Zetterberg format, with the added advantage of time. He is more concise than his colleague, but adds little in the way of new information.

The contribution of Reynolds (1971) is shown in the title, A Primer in Theory Construction. It briefly reviews the essential issues of theory construction.

Abell (1971) follows much the same format as Zetterberg (1963) for the first seven chapters. His last two chapters deal with mathematical implications useful in social science theory construction, as well as what statistical methods would be appropriate in the verification of which types of theory, based on their mathematical pattern.

Gibbs (1972) talks in terms of reworking sociological theories to make them empirically applicable. His emphasis is on the reworking of existing theory to facilitate empirical verification more than on developing new theory. His analysis of the task of theory construction is generally compatible with his colleagues, although his terminology is somewhat distinct and his approach generally more abstract. He is oriented almost exclusively to the nature of the task, leaving the techniques of task accomplishment for others to develop.

Faisal (1977) perceives a gap, to the point of

controversy, between the development of theory on the one hand and the empirical verification process on the other. Her effort is to eliminate that gap by housing both aspects under one roof of theory construction. To Faisal, then, tasks of theory development and empirical verification, heretofore seen as separate entities, are actually phases of the overall task of theory construction. She points to the work of the theory developers, then concentrates on providing numerous and detailed links of empirical methodology to validly and reliably test the hypotheses that emerge from what she perceives as the preliminary methods of theory development.

The actual, hands-on task of theory development, the first phase of Faisal's perception of theory construction, was left for Hage (1972) to develop. Building upon the above-cited efforts which primarily emphasize the philosophy of theory building, Hage divides the task into a series of steps, with each step containing a number of techniques. It is to this operationalization of the task of theory development that we now direct our attention.

Hage (1972) first looks at concepts. He sees categorical concepts of phenomena, which speak to the quality of the phenomena in question, and dimensional concepts of phenomena, which speak to their quantity. He recognizes general, variable concepts, which are culture-free, timeless continua, and specific nonvariable ones, which

denote categories rather than dimensions, and are bound by time, culture, or both. Nonvariable concepts are only nominal in nature, whereas variable ones can be ordinal, interval, or ratio. General variables allow the possibility of finding a universal law, make classification more subtle by following substantially more degrees or levels than nonvariables can deal with, and make thinking easier. For example, the non-variable urbanization is bound by culture and time and does not allow more than a very few categories. The equivalent variable, population density, can be used for any time period, and allows for infinite categories.

Hage (1972) next addresses the task of forming theoretical statements, the label he uses to include the terms hypothesis, proposition, axiom, postulate, assumption, premise, corollary, theorem, etc. The object of theoretical statements, he states, is to move from description to prediction, or continuous connection. According to Hage, a predictive statement is more precise, contains more information, and is more complex than its descriptive counterpart.

Hage's (1972) third chapter, entitled "Specifying the Definitions," posits that a complete definition consists of three parts, the name, the theoretical or dictionary-type definition, and the operational definition, which consists of the measurable indicators. With all three parts a definition is much more precise than it

otherwise would be, akin to having three astronomical fixes to determine location on the high seas. Also, the operational definition allows one to check the utility of the theoretical definition.

Chapter VI (Hage, 1972) deals with the ordering of statements and linkages. Terms germane to this discussion are the following: 1) Premise: a general assumption that explains why; an organization of theoretical linkages. 2) Equation: a less general formula that predicts how; an organization of operational linkages. It is appropriate to order statements and linkages as the number of statements increase beyond ten. This process facilitates criticism, creativity and comprehension.

Although Faisal (1977) sees theory development and verification as phases of the overall process of theory construction, Hage (1972) perceives the two processes as distinct. The object of empirical research, he states, is the verification of theoretical statements, while the object of theory construction is to discover statements worthy of the empirical process. The focus of this study will be on applying what Hage perceives as the construction process to leadership theory, with the objectives of synthesizing existing theory, exposing any inconsistencies, and discovering new statements worthy of empirical research. The details of the empirical verification process, however, will be left for further endeavors.

CHAPTER III

METHOD

The philosophy of theory construction was emphasized in the literature review and the actual task only mentioned. In this chapter the emphasis is on the task. It is here described in some detail.

The methods of theory construction become the tools of analysis for the study. Leadership style theory will be analyzed by this means, and in subsequent chapters the details of this analysis will be described, the findings reported, and conclusions drawn.

A description of the methods of theory construction to be used in this study follows. They are largely derived from Hage (1972).

General variables, or timeless, culture-free continua are found by:

1. Converting non-variables into variables. Non-variables needing conversion are found in sets of categories, in typologies, and in dichotomies. Asking why there are differences tends to point to the variables involved. Non-variables may require more than one variable to cover the conceptual ground.

2. Reducing several variables to a basic dimension through definitional reduction and analogy or fruitful comparison.

General non-variables are found by combining elements through the use of classification schemes and juxtaposition, and decomposing one general non-variable into several.

The techniques for constructing theoretical statements from the variables and non-variables found in the previous process are many and varied. The object is to move from description to prediction, or continuous connection. In either-or statements, after converting the non-variables into variables, the latter are combined into some form of "the greater the X, the greater the Y." In the process, alternative possibilities of meaning are constantly watched for.

When dealing with ideal types, the general variables and their scores are listed, the unit of analysis specified, the existing hypothesis explicated, and the variables connected by a form of "the greater the X, the greater the Y." "Vice-versa" is added if appropriate. Incompatibility between variables is a constant possibility. Two or more typologies from the same unit of analysis implies association between them: a predictive statement may be hidden there. Now the newly created statements are examined to see if they are true for different units of analysis. If so, a related statement has been found.

If not, the answer to the query of why not may lead to the discovery of additional variables that can be dealt with, thus adding to the perspective. The next step involves examining the statements for underlying assumptions. This may lead to additional discoveries and resulting statements. After a tentative set of statements has been formed, an examination of the variables contained therein will probably reveal some form of interdependent system of the variables, which may lead to additional insights. Then each statement is examined for corollaries and auxiliaries.

To construct theoretical definitions of concepts a search is made of diverse sources of information -- the literature, the dictionary, the examiner's own experience and reasoning process, etc. -- to locate and note synonyms and implied meanings. Operational indicators of concepts will probably suggest possibilities. The indicators considered should have a common level of abstraction, and they may contain a term common among them. Then the best word or phrase, on the basis of potential conceptual mileage, is selected.

Specifying operational definitions is more complicated. The indexes of books and tables in journals are good places to find possible indicators. The theoretical definition is checked to see if it suggests other indicators. This list is then compared to the theoretical definition decided upon, keeping only those that belong.

Then, if and how the indicators can be measured is determined. An attempt should be made to construct an index, or a complete operational definition containing rules about how the indicators should cover all aspects of the theoretical definition and strive to mark as many points along the dimension as possible.

As the number of theoretical statements becomes larger than ten, it is appropriate to order them. The methods utilized in this study to order its theoretical statements were derived not so much from Hage's (1972) explanation of how it can be done as they were from an analysis of Hage's (1965; 1980) application of his methods in others of his works. The statements in this paper are primarily ordered by how they have been dealt with in the literature. As evidence of the nature of a relationship between two general variables is available in the literature, that evidence is incorporated into the corresponding theoretical statement of this study. Otherwise this study's statements only predict that a relationship may exist rather than what kind of a relationship there may be.

The steps of theory construction as outlined by Hage (1972) are 1) finding the general variables and non-variables pertaining to the overall theory in question, 2) constructing continuous theoretical statements, 3) specifying the definitions of concepts, and 4) ordering the statements and linkages. The order that the steps

have been taken in this study has been changed, however. It was found that it was impractical to attempt to construct theoretical statements before the definitions of the concepts had been specified. The definitional process reduced the actual concepts involved to a relatively few compared to the names of concepts originally in the literature. Consequently the order that the steps of theory construction are applied in this paper is the following: 1) identifying the conceptual entities involved in the theory of leadership style and putting them into their general variable form; 2) specifying the definitions of the general variables; 3) constructing theoretical statements from the defined general variables; and 4) ordering the theoretical statements. It was expected that by applying these techniques to leadership style theory, the "conceptual chaos that presently exists" (Hage, 1972, p. 124) would be diminished as far as leadership style theory is concerned.

CHAPTER IV

ANALYSIS AND THEORY CONSTRUCTION

As detailed in the previous chapter, the task of constructing an overall theory of leadership style consists of the following procedures. 1) The discovery of the general variables implicit in the literature. 2) The specification of the definitions of the discovered general variables. 3) The construction of theoretical statements connecting the general variables that have been discovered and defined. 4) The ordering of the resulting theoretical statements, based on pertinent findings in the leadership style literature.

In this chapter the findings of each of the above steps are presented, which in turn result in an overall theory -- not yet fully verified, but deserving of empirical analysis -- of what has heretofore been referred to as leadership style.

The Discovery of General Variables in the Literature

Two techniques have been used to discover the general variables contained in the leadership literature. The first consists of searching expressed or implied


patterned conceptualizations -- categories, typologies, taxonomies, paths, etc. -- for relationships that lead to general variables (Hage, 1972). The second technique is that of definitional reduction (Hage, 1972).

The technique of searching for general variables within implied patterned conceptualizations was applied to the major conceptualizations of leadership style. Virtually all of these conceptualizations in the empirical literature have either been refined by or borrowed from the authors about to be discussed in relation to implied patterns. The underlying assumption to the whole process of discovering these general variables is that the following descriptions of the phenomenon represent the universe of leadership style conceptualization as it currently stands in the empirical literature. The conceptualizations were examined for a common denominator which would point to a pattern, which hopefully would reveal a general variable or two. To explain this search and its results, the definitions of the terms used or implied by the researchers to describe leadership style will first be specified. Then a relationship between these terms will be noted. Finally a resulting model will be proposed, from which a general variable will be apparent.

Hersey and Blanchard (1972) use the term style when referring to observed leader behavior. These same researchers (Hersey and Blanchard, 1972) conceptualize

behavior as action in response to a motive. Blake and Mouton's (1978) descriptor of style is concern, which is defined as a marked interest or regard (Webster's Third New International Dictionary, 1976, s.v. concern). Orientation is the word that Reddin (1970) associates with leadership style. Orientation is defined as " . . . the settling of a sense of direction . . . in social concerns" (Webster's Third New International Dictionary, 1976, s.v. orientation). Chemers and Skrzypek (1972) use the word motivation to describe style. The dictionary (Webster's Third New International Dictionary, 1976, s.v. motivation) definition of motivation is something within a person, i.e. drive or incentive, that incites him or her to action. Fiedler (1967) sees style as a leader's psychological needs structure, which can be defined as one's mental requirements to accomplish the task at hand or to develop good relationships with subordinates.

Although the concept of leadership style is not consistent throughout the literature, there appears to be a relationship between the conceptualizations. The cognitive approach to motivation theory (e.g. Deci, 1975) postulates that one's internal needs structure motivates behavior. The leadership style conceptualizations under consideration appear to represent a model, consistent with cognitive motivation theory, leading from needs structure to behavior. Fiedler's needs structure would



be the beginning step, followed by Reddin's orientation, Blake and Mouton's concern, and Chemers and Skrzypek's motivation, and finally, Hersey and Blanchard's behavior. Figure 1 illustrates the proposed model.

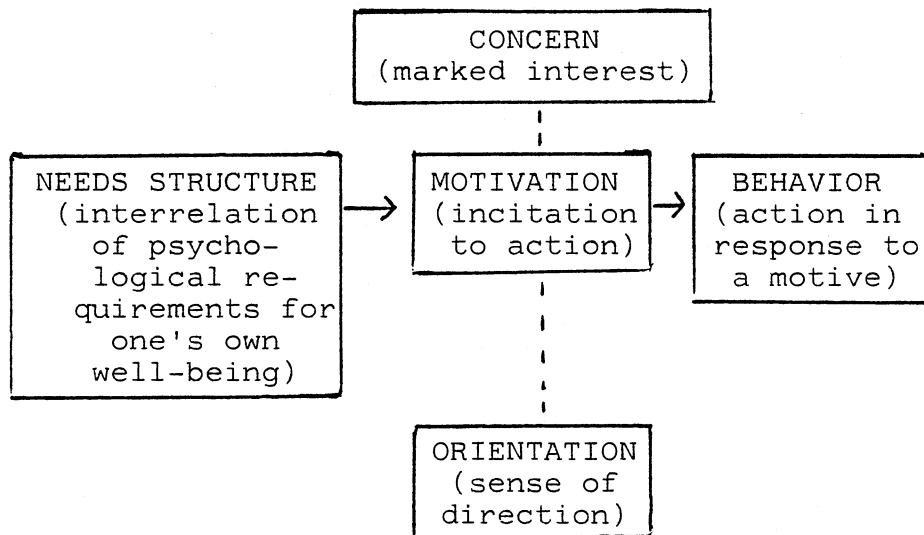


Figure 1. Model of Leadership Style

Leader behavior, then, according to this line of reasoning, would be a response to a motivation to influence others to accomplish tasks and/or build relationships. Motivation, in turn, is influenced by one's concern for people and/or task and one's orientation to people and/or task. Motivation, concern, and orientation are based upon one's needs structure regarding

relationships and/or task accomplishment.

Again, a model, expressed or implied, often contains one or more general variables (Hage, 1972), or timeless, culture-free continua. Asking why there are differences between categories in the model is a key to their discovery. The application of this process to the Leadership Style Model yielded the idea of manifestation of the leader's underlying needs. In other words, the categories of the model seem to represent increasing degrees of the manifestation, or process of expression, (Webster's Third New International Dictionary, 1976, s.v. manifestation), of one's underlying needs to have good relationships with subordinates and/or to accomplish the task. Needs manifestation is the proposed label to identify the general variable contained in the Model of Leadership Style. Needs manifestation, as it applies in a leadership setting, can be defined as the level of expression of one's requirement for good relationships with subordinates and/or task accomplishment. Its operationalization can be formed by combining indicators from the measures already in existence for the various stages comprising the variable. For example, the Least Preferred Co-Worker Scale (Fiedler, 1967) can be used for the operationalization of needs structure, Reddin's (1970) instrument for orientation, and The Leader Behavior Description Questionnaire (Hemphill and Coons, 1950) or LEAD-Self (Hersey and Blanchard, 1972) for behavior.

The second technique for discovering general variables, that of definitional reduction, was next applied by first examining the literature for factors associated with leadership style, from which a compilation of factors was made. As can easily be discerned in Table I, the resulting list is quite cumbersome. To reduce the magnitude of the factors, they were put into categories. Consequently the categories of leader functions, personality traits, and expertise were formed, as depicted in Table II. The categorization process is described in Appendix A.

The examination of the category labeled functions was most productive. It soon became apparent that, as suggested by Stogdill (1974) and others, the functions largely represent a people/task dichotomy. Table III depicts this finding. Recalling that a general variable is a culture-free, timeless continuum, the dichotomy was examined to see if the labels people and task in reality represented points along a continuum. The Ohio State studies (Hemphill and Coons, 1950) have apparently addressed this question and concluded that leader behavior can more accurately be described in terms of two continua rather than one. This conceptualization of leader behavior seemed to be timeless and culture-free. Continua were present. The existence of two general variables (one for each continuum) implicit in the Ohio State conceptualization was thus indicated. At this

TABLE I
FACTORS EMPIRICALLY ASSOCIATED WITH
LEADER NEEDS MANIFESTATION

Decision-making	Mechanical ability
Withstand threat of danger to self, comrades	(Cummings, 1970)
Prepare subordinates for consequences	Exchange
(Anderson, 1980)	Supervision
	(Dansereau, 1975)
Autocratic	Achieved status
Democratic	(Doyle, 1971)
(Ballard, 1978)	Experience
Tough/tender-mindedness	(Fiedler, 1972)
Practicality	Participatory
Conservativeness	(Fields, 1980;
Group dependency	Kaufman, 1979)
Experimentation	Cognitive complexity
Self-sufficiency	(Fralish, 1977;
(Batlis and Green,	Mitchell, 1970)
1980)	Machiavellianism
Cognitive style	(Haggerty, 1979)
(Bivona, 1980)	Consideration
Concern for people	Initiation of structure
Concern for task	(Hemphill and Coons,
(Blake and Mouton,	1950)
1978)	Dominance
Support	Self-acceptance
Goal Emphasis	Communality
Work Facilitation	(Hogan, 1978)
(Bowers and Seashore,	Technical competence
1966)	Decisiveness
Participative style	Hierarchical influence
(Carnie, 1979)	(House, Filley, and
Relationships motivation	Gujarati, 1971)
Task motivation	Authoritarianism
(Chemers and	Emotional detachment
Skrzypek, 1972)	Hierarchical independence
Expertise	(derived from Blau and
(Csoka, 1974)	Scott, 1962)
	(Hoy and Rees, 1974)

TABLE I (Continued)

Autocratic	Locus of information
Hierarchical level	Locus of power
(Jago and Vroom	(Shapira, 1976)
(1977)	
Positive self-concept	Conceptual complexity
(Johnson, 1976)	(Silver, 1975)
Exchange behavior	Initiation of structure
Functional behavior	Consideration
Task related	Representation
Socioemotionally related	Demand reconciliation
(Lord, 1977)	Tolerance of uncertainty
	Persuasiveness
Performance	Role assumption
Maintenance	Production emphasis
(Misumi and Seki,	Predictive accuracy
1971)	Integration
	Influence with supervisors
	(Stogdill, 1959)
Need for Achievement	
Need for Power	Administrative achievement
Need for Affiliation	Democratic orientation
(Perkins, 1971)	Intelligence
	Conscientiousness
People orientation	Warmheartedness
Task orientation	Being relaxed
(Reddin, 1970)	Assertiveness
	(Wennergren, 1971)
Supportive relationships	
Group decisionmaking and	
supervision	
High goal orientation	
(Reese, 1973)	
Instrumental	
Expressive	
(Rossel, 1970)	
Role clarification	
Specification of procedures	
Work assignment	
Support	
Expectancy	
(Schriesheim, 1978)	

TABLE II
 CATEGORIES OF FACTORS ASSOCIATED WITH
 LEADER NEEDS MANIFESTATION

Functions	Personality Traits	Expertise
Democratic	Tough-mindedness	Decision-making
Autocratic	Tender-mindedness	Withstand threat of
Concern for people	Practicality	danger to self,
Concern for task	Conservativeness	comrades
Participative	Group dependency	Prepare subordi-
Exchange	Imaginativeness	nates for conse-
Supervision	Experimentation	quences
Relationships	Self-sufficiency	Mechanical ability
motivation	Dominance	Expertise
Task motivation	Authoritarianism	Technical compe-
Consideration	Warmheartedness	tence
Initiation of	Assertiveness	Conceptual com-
structure	Conscientiousness	plexity
Socioemotionally	Machiavellianism	Cognitive complex-
related	Decisiveness	ity
Task related	Being relaxed	Cognitive style
Maintenance	Intelligence	Self-acceptance
Performance	Communality	Positive self-
Need for		concept
affiliation		Achieved status
Need for power		Experience
Need for		Hierarchical in-
achievement		fluence
Supportive		Administrative
relationships		achievement
High goal		Hierarchical inde-
orientation		pendence
Group decision-		Locus of informa-
making and		tion
supervision		Locus of power
Expressive		Hierarchical level
Instrumental		Emotional detach-
Democratic		ment
orientation		Initiation of
Role clarification		structure
Specification of		Consideration
procedures		Representation
Work assignment		Demand reconcili-
Expectancy		ation
Support		Tolerance of
Goal emphasis		uncertainty

TABLE II (Continued)

Functions	Personality Traits	Expertise
Work facilitation		Persuasiveness
Interaction facilitation		Tolerance of free- dom of action
Participatory		Role assumption
Production emphasis		Predictive accuracy
Functional		Integration
People orientation		Influence with
Task orientation		supervisors

TABLE III
FUNCTIONS OF LEADER NEEDS MANIFESTATION

Researcher	People Emphasis	Task Emphasis
Ballard	Democratic	Autocratic
Blake and Mouton	Concern for people	Concern for task
Bowers and Seashore	Support Interaction facilitation	Goal emphasis Work facilitation
Chemers and Skrzypek	Relationships motivation	Task motivation
Dansereau	Exchange	Supervision
Fields	Participatory	
Hemphill	Consideration	Initiation of structure
Jago and Vroom	Participative	Autocratic
Lord	Socioemotionally related	Task related
Misumi	Maintenance	Performance
Perkins	Need for affili- ation	Need for power Need for achieve- ment
Reddin	People orientation	Task orientation
Reese	Supportive rela- tionships	High goal orienta- tion
Rossel	Expressive	Instrumental
Schriesheim		Specification of procedures Work assignment

TABLE III (Continued)

Researcher	People Emphasis	Task Emphasis
Stogdill		Production emphasis
Wennergren	Democratic orientation	Administrative achievement

point the Ohio State labels (Consideration for leader behavior emphasizing relationships, and Initiating Structure for leader behavior emphasizing the task) only needed to be refined to meet the criteria for general variables.

It was decided to employ the following criteria in selecting general variable labels:

1. Timeless and culture-free
2. Capable of measurement along a continuum
3. Congruent with the theoretical definition: convey its basic idea
4. Concise: no more than three words
5. Accomodate, insofar as possible, all examples of the definition

Both Initiating Structure and Consideration, while appearing to be timeless and culture-free, seem to be weak on implying dimension. Also, congruency with their theoretical definitions seems questionable. The following labels are therefore offered, which appear as well to meet the remaining criteria, namely conciseness and all-inclusiveness. Task requirement, the strength of the leader's need to accomplish the work task, will, for the purposes of this paper, identify one of the general variables, on the needs level of analysis, implicit in the people-task dichotomy. The other general variable on the needs level will be labeled people requirement, denoting the strength of the leader's need to build relationships. The behavior level general variables are as follows: People emphasis will denote the degree to

which the leader gives attention to the well-being of the follower group, and task emphasis is proposed as the label for the amount of leader attention given to the work task.

Stogdill (1948) found that leader traits predicting successful performance differed according to the situation. The present effort verifies Stogdill's conclusion in that a majority of the personality dimensions as conceptualized in the Sixteen Personality Factor Questionnaire (Cattell, Eber, and Tatsuoka, 1970) are represented as factors associated with leader needs manifestation (see Table II). On the basis of the Stogdill finding, and since a definite trait pattern associated with leadership has not yet developed in the literature subsequent to Stogdill, it was decided to delete the personality traits associated with leader needs manifestation from further analysis in this paper.

The category labeled expertise was examined next, and it, too, proved productive in its yield of general variables.

Two of Fiedler's (1967) situation indicators, leader-member relations and position power, deal with the influence a leader has with subordinates. Some of the factors associated with leader needs manifestation in the expertise category -- hierarchical influence, hierarchical independence, locus of information, and influence with supervisors -- also deal with leader influence, only in this case it is with superiors. Since influence

with subordinates is considered a factor of situation, it appears reasonable to consider influence with superiors in the same manner. For this reason the factors in this study that deal with leader influence with supervisors have been left for future consideration as aspects of the situation.

Definitional reduction yielded quite a number of consolidations among the remaining factors in the expertise category (Table II). Table IV shows this process of consolidation. The theoretical definitions used are expressed or implied by the authors, or failing that, are derived from Webster's Third New International Dictionary (1976 edition).

Further analysis required that the surviving factors from Table IV be stated in their general variable form. Accordingly, each factor was examined on the basis of the criteria established for general variable labels (p. 33), and its name modified if needed.

Consideration (used here in a much more narrow sense than in the Hemphill and Coons (1950) study), or leader emphasis on the well-being of the follower group, was judged to be timeless in concept, culture-free, capable of being measured on a continuum, congruent with the theoretical definition, concise, and accomodating of all examples that could be imagined. Since the label appears to meet the established criteria (see p. 33), it therefore remains unchanged.

TABLE IV
 DEFINITIONAL REDUCTION OF LEADERSHIP FACTORS
 IN EXPERTISE CATEGORY

Factors in the Literature	Definitional Entities
Representation (v): leader speaks and acts as the representative of the follower group (Stogdill, 1959). Support (d): leader upholds by aid, countenance, or adherence (Schriesheim, 1978).] - reduced to - CONSIDERATION (v): leader is considerate of the well-being of the follower group (Stogdill, 1959). (this label is used here in a much more narrow sense than it was by Hemphill and Coons (1950)).
(This concept had no alternative labels in the literature.)	EXPECTANCY (i): a) effort will lead to successful performance; b) performance will lead to rewards valued by the leader (Schriesheim, 1978).
Achieved status (i): prestige of leader resulting from competence]

TABLE IV (Continued)

and expertise (Doyle, 1971).

Cognitive complexity (v): number of dimensions-worth of concepts an individual leader brings to bear in describing a particular domain of phenomena (Fralish, 1977; Mitchell, 1970).

Cognitive style (v): the reference sets (symbolic, culture determinant, modalities of inference) a leader utilizes in internalizing phenomena (Bivona, 1980).

Hierarchical level (i): leader's position in organizational structure (Jago and Vroom, 1977).

Mechanical ability (i): skill of leader in performing the task he/she supervises (Cummings, 1970).

Technical competence (i): the degree to which a leader is perceived as capable of providing advice on technical or specialized problems and capable of anticipating job-related details prior to assign-

- reduced to - EXPERTISE (i): (1) Experience: leader education concerning, observation of, and/or participation in work task, (2) intelligence: ability to integrate experience (Csoka, 1974).

TABLE IV (Continued)

ing tasks (House, Filley and Gujarati, 1971).]

Decision-making (i): ability of leader to arrive at a choice of action (Anderson, 1980). }

Role clarification (i): leader makes work role demands unambiguous and predictable (Schriesheim, 1978).

Specification of procedures (i): leader states precisely the particular procedures to be carried out in the accomplishment of the task (Schriesheim, 1978).

Work assignment (i): leader prescribes, specifies, and appoints to a duty (Schriesheim, 1978).

(note: the following appear to mark points on a continuum of initiation of structure.) }

TABLE IV (Continued)

Group decision-making and supervision (i): group makes own decisions and does own supervision (Reese, 1973).

Tolerance of freedom of action (v): leader allows follower group scope for initiative in decision and action (Stogdill, 1959).

Exchange behavior (i): leader chooses dynamic interpersonal processes which are functions of needs existing in a given situation (Lord, 1977).

Role assumption (v): leader assumes the leadership role; does not surrender leadership to other persons (Stogdill, 1959).

- reduced -

INITIATION OF STRUCTURE (v): leader clarifies own role and lets follower group know what is expected (Stogdill, 1959). (used here in a much more narrow sense than it was by Hemphill and Coons (1950)).

(This concept had no alternative labels in the literature.)

INTEGRATION (v): leader maintains a closely knit organization. Resolves intermember conflicts (Stogdill, 1959).

TABLE IV (Continued)

Ability to prepare subordinates for consequences (i): leader skill in putting follower group into a suitable frame of mind for a necessary result (Anderson, 1980).

- reduced to -

PERSUASIVENESS (v): leader presents point of view with conviction. Influenced by convincing argument (Stogdill, 1959).

Positive self-concept (d): leader's perception of self as worthwhile, contributing, confident, satisfied (Johnson, 1976).

- reduced to -

SELF-ACCEPTANCE (i); leader confidence, assurance (Hogan, 1978).

Demand reconciliation (v): leader reconciles conflicting organizational demands and reduces disorder to the system (Stogdill, 1959).

Emotional detachment (i): leader ability to remain calm and to control temper (Hoy and Rees, 1974).

Predictive accuracy (v): leader exhibits foresight and ability to predict outcomes accurately (Stogdill, 1959).

- reduced to -

TOLERANCE OF UNCERTAINTY (v): leader tolerates postponement and uncertainty of outcome without anxiety (Stogdill, 1959).

TABLE IV (Continued)

Withstand threat of danger to self,
comrades (i): in combat situation,
leader performs in spite of
possibility of death, injury to
self and/or subordinates
(Anderson, 1980).

key to definitions:

- v = verbatim from the literature
- i = interpreted from the literature
- d = dictionary definition

Expectancy incorporates two conceptual entities in its definition: 1) the belief that effort will result in satisfactory performance, and 2) the belief that satisfactory performance will result in valued rewards. Therefore, two labels, one for each concept, are needed. Performance belief and reward belief appear to be culture-free, may be dimensionally measured, seem congruent with their respective definitions, concise, and all-inclusive. They are consequently proposed as the labels for the general variables contained in the concept of expectancy.

Expertise also includes two distinct concepts, 1) education concerning, observation of and/or participation in the work task; and 2) the ability to integrate experience (Czoka, 1974). Experience is proposed for the former concept, and intelligence for the latter, since these labels appear to meet the criteria established for general variable labels.

The definition of initiation of structure is that the leader clarifies his or her own role and does so also for the follower group. Role clarification, a label whose definition was incorporated by that of initiation of structure, seems more congruent with this theoretical definition, appears to meet the other established criteria, and so becomes the label of this general variable.

The label integration, leader maintenance of

a closely knit organization and resolution of intermember conflicts, seemed to imply dimension more strongly with the word emphasis added. Integration emphasis, then, is the label proposed for this general variable. Persuasiveness, or leader presentation of own point of view with conviction and convincing argument, was judged to comply with the general variable criteria. Therefore the label remains the same.

Self-acceptance, or leader confidence and assurance, was judged to meet the general variable criteria and so remains intact.

The label tolerance of uncertainty, or leader tolerance of postponement and uncertainty of outcome without anxiety, also remains intact, as it appears to meet the established criteria for general variables.

The Specification of the Definitions of the Discovered General Variables

Now that the general variables had been isolated, the next step was to define them both theoretically and operationally, as discussed by Hage (1972) and in Chapter III of this study (p. 18). It will then be recalled that the ideal definition contains three parts, the name or label, the theoretical or dictionary-type definition, and the operational definition, consisting of measurable indicators. In the process of discovering the general variables their labels have already been affixed. The

theoretical definitions of the general variables are treated next, followed by a discussion of their operational counterparts.

An additional requirement of a theoretical definition for a general variable is that it convey measurable dimension (Hage, 1972). Accordingly, each definition which follows contains the element of dimension.

Behavior difference: Degree to which one's acts of leadership differ from that of his/her superior.

Consideration: Level of priority given by leader to the well-being of the follower group.

Experience: Amount of education concerning, observation of, and/or participation in the work task.

Influence with supervisors: Amount of effect a leader has on the leadership behavior of his/her superiors.

Integration emphasis: Amount of attention given to group harmony and unity.

Intelligence: Level of ability to use one's experience to good advantage in accomplishing a work task and/or in influencing others to do so.

Performance belief: Strength of leader belief that effort will result in satisfactory task accomplishment.

Persuasiveness: Level of leader ability to convince by appealing to reason and/or feelings.

Reward belief: Strength of leader belief that

satisfactory task accomplishment will result in valued rewards.

Role clarification: Degree of precision with which leader makes known own and follower group's roles.

Self-acceptance: Leader's perception of own level of confidence and satisfaction.

Tolerance of uncertainty: Leader capacity to endure ambiguity.

It is at present almost impossible to specify a complete operational or measurable definition of a concept because indicators tend to overlap and because indicators have probably not been found to measure all the meaning expressed or implied by a theoretical definition (Hage, 1972). For the above reasons the operational aspects of the general variables in this study will be labeled indicators rather than definitions. Where standardized tests covering a particular variable have been found, those tests or applicable parts thereof are cited as operational possibilities rather than listing the individual indicators contained therein. Table V summarizes the entire definitional process and contains some possible operational indicators for each of the general variables under consideration.

To summarize thus far, the somewhat ambiguous concept of leadership style has been shown to be more accurately portrayed by the label needs manifestation, denoting a continuum from psychological needs to acting upon them.

TABLE V
 THE DEFINITIONAL PROCESS OF THE FACTORS ASSOCIATED
 WITH LEADER NEEDS MANIFESTATION

Factor as Labeled in the Literature	General Variable	Theoretical Definition	Possible Operational Indicators
Hierarchical independence	Behavior difference	Degree to which one's acts of leadership differ from that of his/ her superior.	Leader Behavior Description Ques- tionnaire (Original form)
Consideration	Consideration	Level of priority given by leader to the well-being of the follower group.	Leader Behavior Description Ques- tionnaire, Form XII, "Consideration" measures
Expertise	Experience	Amount of education concerning, obser- vation of, and/or participation in the work task.	- Level of education - Index of job-up- grading activities - Years of job- related experience
	Intelligence	Level of one's ability to use one's experience to good advantage in accom- plishing a work task and/or in influencing	Hemnon-Nelson Mental Ability Test

TABLE V (Continued)

		others to do so.	
Influence with supervisors	Influence with supervisors	Amount of effect a leader has on the leadership behavior of his/her superiors.	Leader Behavior Description Questionnaire, Form XII, "Influence with Supervisors" measures
Integration	Integration emphasis	Amount of attention given to group harmony and unity.	Leader Behavior Description Questionnaire, Form XII, "Integration" measures
Expectancy	Performance belief	Strength of belief that effort will result in satisfactory task accomplishment.	Leader-perceived relationship of time, education, and practice to task accomplishment
	Reward	Strength of belief that satisfactory task accomplishment will result in valued returns.	- List of rewards, leader-perceived value of each - Leader-perceived relationship of task accomplishment to rewards

TABLE V (Continued)

Initiation of Structure	Role clarification	Degree of precision with which leader makes known own and follower group's roles.	Leader Behavior Description Questionnaire, Form XII, "Initiation of Structure" measures
Self-acceptance	Self-acceptance	Leader's perception of own level of confidence and satisfaction.	Tennessee Self-Concept Scale
Tolerance of uncertainty	Tolerance of uncertainty	Leader capacity to endure ambiguity.	Leader Behavior Description Questionnaire, Form XII, "Tolerance of Uncertainty" measures

Then the factors associated with leader needs manifestation have been listed, categorized, consolidated by definitional reduction, put into their general variable form, theoretically defined, and possible operational indicators suggested.

From the category functions the following general variables associated with leader needs manifestation have been derived.

Needs level:

People requirement

Task requirement

Behavior level:

People emphasis

Task emphasis

From the category expertise come these general variables.

Consideration

Experience

Integration emphasis

Intelligence

Performance belief

Persuasiveness

Reward belief

Role clarification

Self-acceptance

Tolerance of uncertainty

It now became possible, perhaps as a result of

definitional precision, to further refine the categories of general variables associated with leader needs manifestation. The category labeled functions remained intact, consisting of the general variables people emphasis, task emphasis, people requirement, and task requirement. The category expertise, however, subdivided into several others. Experience, intelligence, persuasiveness, self-acceptance, and tolerance of uncertainty are all abilities or qualities that a leader possesses, and have been classified as attributes for the purposes of this study. Performance belief and reward belief are both ways that a leader judges the balance between rewards from and commitment to a leadership opportunity. These two variables were consequently classified as personal benefits. Finally, integration emphasis, consideration, and role clarification are methods employed by a leader; these were classified as strategies. Table VI summarizes this observation.

On the behavior level, functions and strategies seemed to be closely allied. Although each of the strategies may be motivated by either people or task needs, the word strategy implies action, and so appears to denote a behavioral (observable action) level of analysis. Each strategy, moreover, seemed to imply either a people or a task emphasis, regardless of the needs or motives underlying the action. Table VII indicates this classification. The strategies, then, become subdivisions of

TABLE VI
 CATEGORIES OF GENERAL VARIABLES ASSOCIATED
 WITH LEADER NEEDS MANIFESTATION

Category	General Variable
Functions	People requirement Task requirement People emphasis Task emphasis
Attributes	Experience Intelligence Persuasiveness Self-acceptance Tolerance of uncertainty
Personal Benefits	Performance belief Reward belief
Relationship with Superiors	Behavior difference Influence with supervisors
Strategies	Integration emphasis Consideration Role clarification

TABLE VII
STRATEGIES AS FUNCTIONS OF PEOPLE OR TASK EMPHASIS

		FUNCTIONS	
		People Emphasis	Task Emphasis
STRATEGIES	Integration emphasis		
	Consideration		Role clarification

the behavioral level functions, and the category strategies is removed as a separate entity.

The final categories, then, of the general variables associated with leader needs manifestation were found to be functions, attributes, and personal benefits.

The Construction of Theoretical Statements

The next task was the construction of theoretical statements as discussed by Hage (1972) and earlier in this chapter (Chapter II, p. 16). The statements are constructed by showing possible connections between the specified general variables. The theoretical statements that follow will be based on the possible relationships of leader attributes and personal benefits to the leadership functions on both the needs (people and task requirement) and the behavior (people and task emphasis) levels.

As noted in Chapter II (p. 16) Hage proposes that the object of theoretical statements should be to predict rather than merely describe. The form "the greater the X, the greater the Y", or some variation thereof, is recommended, and will be used in this paper. Although the philosophy behind the construction of the following theoretical statements comes from Hage (1972), the actual pattern and sequence of steps herein adhered to are derived from two other works by the same author (Hage, 1965; 1980).

The primary relationships between leader attributes and personal benefits with the levels of leader functions are fairly straightforward and are listed as the Major Theoretical Statements of this paper in Table VIII. Care has been taken in the forming of the statements to merely predict a relationship at this early stage, not to predict the nature or direction of the relationship nor imply causality. The format of each statement, however, allows for its refinement, as more becomes known about it, with a minimum of rewording.

As demonstrated by Hage (1965) when predicting relationships between variables in the categories labeled organizational means and organizational ends, the application of syllogistic reasoning to theoretical statements predicting relationships can derive a number of corollaries. Care must be exercised, however, to not go beyond what the rules of syllogism allow in the quest to specify more corollaries. For example, Hage's (1965, p. 300) first theoretical statement is, "The higher the centralization [hierarchy of authority], the higher the production [effectiveness]," centralization being an organizational means and production an organizational end. Its reciprocal, "the higher the production, the higher the centralization," an end influencing a means, does not appear to be equally valid. Therefore causation seems to be implied (centralization yields higher production). Adopting the pattern used in Bird (1964), the statement

TABLE VIII
MAJOR THEORETICAL STATEMENTS

I. Possible relationships between Attributes and Functions

Needs level

People requirement

1. The (higher/lower) the experience the (higher/lower) the people requirement.
2. The (higher/lower) the intelligence the (higher/lower) the people requirement.
3. The (higher/lower) the persuasiveness the (higher/lower) the people requirement.
4. The (higher/lower) the self-acceptance the (higher/lower) the people requirement.
5. The (higher/lower) the tolerance of uncertainty the (higher/lower) the people requirement.

Task requirement

6. The (higher/lower) the experience the (higher/lower) the task requirement.
7. The (higher/lower) the intelligence the (higher/lower) the task requirement.
8. The (higher/lower) the persuasiveness the (higher/lower) the task requirement.
9. The (higher/lower) the self-acceptance the (higher/lower) the task requirement.
10. The (higher/lower) the tolerance of uncertainty the (higher/lower) the task requirement.

Behavior level

People emphasis

11. The (higher/lower) the experience the (higher/lower) the people emphasis.
12. The (higher/lower) the intelligence the (higher/lower) the people emphasis.
13. The (higher/lower) the persuasiveness the (higher/lower) the people emphasis.
14. The (higher/lower) the self-acceptance the (higher/lower) the people emphasis.

TABLE VIII (Continued)

-
15. The (higher/lower) the tolerance of uncertainty the (higher/lower) the people emphasis.

Task emphasis

16. The (higher/lower) the experience the (higher/lower) the task emphasis.
17. The (higher/lower) the intelligence the (higher/lower) the task emphasis.
18. The (higher/lower) the persuasiveness the (higher/lower) the task emphasis.
19. The (higher/lower) the self-acceptance the (higher/lower) the task emphasis.
20. The (higher/lower) the tolerance of uncertainty the (higher/lower) the task emphasis.

II. Possible relationships between Personal Benefits and Functions

Needs level

People requirement

21. The (higher/lower) the performance belief the (higher/lower) the people requirement.
22. The (higher/lower) the reward belief the (higher/lower) the people requirement.

Task requirement

23. The (higher/lower) the performance belief the (higher/lower) the task requirement.
24. The (higher/lower) the reward belief the (higher/lower) the task requirement.

Behavior level

People emphasis

25. The (higher/lower) the performance belief the (higher/lower) the people emphasis.
26. The (higher/lower) the reward belief the (higher/lower) the people emphasis.

TABLE VIII (Continued)

Task emphasis

27. The (higher/lower) the performance belief
the (higher/lower) the task emphasis.
 28. The (higher/lower) the reward belief the
(higher/lower) the task emphasis.
-

in question, then, may be symbolized as follows:

$$C \rightarrow P$$

Hage's (1965, p. 300) third statement is "The higher the centralization [hierarchy of authority], the higher the formalization [standardization]." Again it does not appear that its reciprocal is equally valid. Causality therefore seems also to be implied in Hage's third statement, and if so, the statement can be symbolized as follows:

$$C \rightarrow F$$

Hage's (1965, p. 300) first corollary is, "The higher the formalization, the higher the production." It appears to be derived from a reasoning process that may be stated, "Centralization (C) yields higher production (P), and centralization (C) also yields higher formalization (F); therefore (\therefore) formalization (F) yields higher production (P)." In symbolic terms, the logic may be portrayed as follows:

$$C \rightarrow P$$

$$C \rightarrow F$$

$$F \rightarrow P$$

The rules of syllogism as explained by Bird (1964) do not allow for that conclusion. This format yields the Iba possibility, which, interpreted in terms of the statement in question, would state, "Therefore no formalization is related to production," and would be symbolized as follows:

$$\therefore \sim F \rightarrow P$$

It does not follow, in other words, that there is a relationship between formalization and production given a causal relationship between these two variables and centralization.

If, however, reciprocity (symbolized " \leftrightarrow ") could be validly assumed in this case, then the corollary as derived by Hage would be legitimate. A correct syllogism would take the following symbolic form if reciprocity were present:

$$\begin{array}{c} C \leftrightarrow P \\ C \leftrightarrow F \\ \hline \therefore F \leftrightarrow P \end{array}$$

In this paper the format of the Major Theoretical Statements (Table VIII) allows for the possibility of reciprocity. Most of the corollaries derived from the major statements therefore follow the last specified syllogistic reasoning pattern, and are listed in Table IX.

The word possible takes on a high level of significance in the context of this research effort. Although based on the literature, the Major Theoretical Statements predict only possible relationships between variables. Upon empirical examination it stands to reason that there is a good possibility that some will fall by the wayside. Further, the corollaries are not only based on statements

TABLE IX
DERIVED COROLLARIES

-
- a. As experience (increases/decreases) intelligence (increases/decreases).
 - b. As experience (increases/decreases) persuasiveness (increases/decreases).
 - c. As experience (increases/decreases) self-acceptance (increases/decreases).
 - d. As experience (increases/decreases) tolerance of uncertainty (increases/decreases).
 - e. As intelligence (increases/decreases) persuasiveness (increases/decreases).
 - f. As intelligence (increases/decreases) self-acceptance (increases/decreases).
 - g. As intelligence (increases/decreases) tolerance of uncertainty (increases/decreases).
 - h. As persuasiveness (increases/decreases) self-acceptance (increases/decreases).
 - i. As persuasiveness (increases/decreases) tolerance of uncertainty (increases/decreases).
 - j. As self-acceptance (increases/decreases) tolerance of uncertainty (increases/decreases).
 - k. As experience (increases/decreases) performance belief (increases/decreases).
 - l. As experience (increases/decreases) reward belief (increases/decreases).
 - m. As intelligence (increases/decreases) performance belief (increases/decreases).
 - n. As intelligence (increases/decreases) reward belief (increases/decreases).
 - o. As persuasiveness (increases/decreases) performance belief (increases/decreases).

TABLE IX (Continued)

-
- p. As persuasiveness (increases/decreases) reward belief (increases/decreases).
 - q. As self-acceptance (increases/decreases) performance belief (increases/decreases).
 - r. As self-acceptance (increases/decreases) reward belief (increases/decreases).
 - s. As tolerance of uncertainty (increases/decreases) performance belief (increases/decreases).
 - t. As tolerance of uncertainty (increases/decreases) reward belief (increases/decreases).
 - u. As performance belief (increases/decreases) reward belief (increases/decreases).
 - v. As task requirement (increases/decreases) people requirement (increases/decreases).
 - w. As task requirement (increases/decreases) task emphasis (increases/decreases).
 - x. As task requirement (increases/decreases) people emphasis (increases/decreases).
 - y. As people requirement (increases/decreases) people emphasis (increases/decreases).
 - z. As people emphasis (increases/decreases) task emphasis (increases/decreases).
 - a'. As people requirement (increases/decreases) task emphasis (increases/decreases).
-

that are merely possible, they are also contingent upon reciprocity between the variables within the statements, only a possibility. Therefore, at this stage of theoretical development, the corollaries can at most be regarded as possibilities.

The Ordering of the Theoretical Statements

A few of the major statements and their corollaries are treated in the literature, but most are yet to be empirically considered. From those that have been recognized, however, it is possible to predict direction and draw inferences, thus enabling some of the statements to be more specific in their prediction of direction. This prediction of direction, however, is not intended to limit the possible nature of the relationship between the variables to a linear one only. The door is intended to remain open for the possibility of curvilinear, quadratic, and power relationships also.

Jago and Vroom (1977) found that high position in the organizational structure was positively correlated with a participative leadership style. In the present effort the leader's position in the organizational structure was incorporated in the general variable experience (see p. 38, Table IV, s.v. expertise). Jago and Vroom (1977) refer to style in terms of strategies, a behavioral

conceptualization. Consequently what these authors call participative leadership style is roughly equivalent to what is herein labeled people emphasis. Experience and people emphasis are, in turn, the general variables contained in Statement 11 (Table VIII), "As experience (increases/decreases) people emphasis (increases/decreases) people emphasis (increases/decreases)." Based on the Jago and Vroom (1977) findings, Statement 11 can become more specific:

As experience increases people emphasis also increases.

Silver (1975) found conceptual complexity, shown in this effort to be incorporated into the general variable intelligence (Table IV), to be a predictor of leader consideration, a function of people emphasis (Table VI), in this paper. Similarly Fralish (1977) showed that cognitive complexity, also found to be included in the concept of intelligence as used in this paper (Table IV), predicted consideration, or people emphasis. Statement 12 contains the general variables under consideration, and may therefore be stated more precisely:

As intelligence increases people emphasis also increases.

Cognitive complexity has also been shown to correlate positively with a high Least Preferred Coworker score, a measurement indicating high relationships needs (Mitchell, 1970). Need for good relationships is herein

labeled people requirement. Statement two may therefore be more specifically rendered:

As intelligence increases people requirement also increases.

According to Johnson (1976), self-concept predicts both consideration and initiating structure. Self-acceptance, people emphasis, and task emphasis are the respective labels used in this paper for the concepts in the Johnson (1976) hypothesis. Consequently statements 14 and 19 may be more precisely written:

14. As self-acceptance increases people emphasis also increases.

19. As self-acceptance increases task emphasis also increases.

Perkins (1971) found that leader need for power indicated high structure, and that need for affiliation predicted high consideration. Putting these findings in terms used in this study, they can be restated: Leader task requirement indicates high task emphasis, and people requirement predicts high people emphasis. Derived Corollaries "w" and "a" may therefore be stated with more precision:

As task requirement increases task emphasis also increases.

As people requirement increases people emphasis also increases.

Again, by syllogistic reasoning, it is possible

to derive three more precise corollaries, based on the more precise composition of Major Theoretical Statements 11, 12, and 14. Since experience (Statement 11), intelligence (12), and self-acceptance (14) all predict people emphasis, and the possibility of reciprocity still exists, the direction of the relationship between those variables may also be hypothetically stated. It is therefore possible to predict direction in Derived Corollaries (Table IX) a, c, and n:

- a. As experience increases intelligence also increases.
- c. As experience increases self-acceptance also increases.
- n. As intelligence increases self-acceptance also increases.

To summarize the statements and corollaries for which direction can be predicted due to the results of empirical studies, Table X is offered.

In summary of procedures three and four (the construction and ordering of theoretical statements), the prediction of relationships between the general variables in the attributes and personal benefits categories with those in the functions category yielded some twenty-eight Major Theoretical Statements concerning leader needs manifestation. In addition, by the process of syllogistic reasoning, twenty-seven Derived Corollaries of the major statements were specified. On the basis of

TABLE X
 STATEMENTS AND COROLLARIES FOR WHICH
 DIRECTION IS PREDICTED

Statement 11:	As experience increases people emphasis also increases. (Jago and Vroom, 1977)
Statement 12:	As intelligence increases people emphasis also increases. (Silver, 1975: Fralish, 1977)
Statement 2:	As intelligence increases people requirement also increases. (Mitchell, 1970)
Statement 14:	As self-esteem increases people emphasis also increases. (Johnson, 1976)
Statement 19:	As self-esteem increases task emphasis also increases. (Johnson, 1976)
Corollary a:	As experience increases intelligence also increases.
Corollary c:	As experience increases self-acceptance also increases.
Corollary n:	As intelligence increases self-acceptance also increases.
Corollary w:	As task requirement increases task emphasis also increases.
Corollary a':	As people requirement increases people emphasis also increases.

findings in the leadership literature the direction of the relationship between the general variables of five major statements and six corollaries have been predicted.

Chapter Summary

The attempt was made to synthesize and enumerate an exhaustive listing of theoretical statements concerning leadership style theory by utilizing procedures described by Hage (1972) and applied by the same author (Hage, 1965; 1980).

Procedure 1: The Discovery of General Variables Implicit in the Leadership Style Literature. By examining the major conceptualizations of leadership style an implicit model was discovered from which the variable needs manifestation was derived. This new general variable was then defined and subsequently used throughout the paper to replace the more ambiguous term leadership style. The literature was then examined for factors associated with leader needs manifestation. Several factors were found to fit the category labeled functions, and from this category several general variables emerged. The remaining factors were either eliminated or classified under the category expertise, and by the technique of definitional reduction several more general variables were derived.

Procedure 2. The Specification of the Definitions of the Discovered General Variables. The newly specified

general variables associated with leader needs manifestation were then defined theoretically, and possible operational indicators were suggested for each of them. The variables were then assigned to final categories in preparation for the construction of theoretical statements.

Procedure 3: The Construction of Theoretical Statements Connecting the General Variables that have been Discovered and Defined. The general variables in the functions category were theoretically connected to those in the other categories to form twenty-eight Major Theoretical Statements. Syllogistic reasoning was applied to the major statements, and twenty-seven Derived Corollaries were formed.

Procedure 4: The Ordering of the Resulting Theoretical Statements, Based on Pertinent Findings in the Literature. In the statements and corollaries only connection between certain variables is predicted, not the direction that the connection takes. On the basis of pertinent findings in the literature, direction is predicted for five of the statements and six of the corollaries.

The statements, the corollaries, and those that are refined to predict direction combine to form the beginnings, or skeleton as it were, of an overall theory, axiomatic at this point to be sure, of leader needs manifestation, heretofore known as leadership style.

CHAPTER V

FINAL OBSERVATIONS

This study began by lamenting the inconsistencies and contradictory findings in the field of leadership theory generally, and particularly in the leadership style studies (p. 1). The study went on to prescribe a remedy to the perceived problems, consisting primarily of the application of selected techniques from Hage's (1972) treatise on theory construction. It is time now to evaluate the prescribed remedy and the results of its application to the problems. To this end the nature of the problems extant in the theory of leadership style will be reviewed, Hage's theory construction methods used in this paper will be evaluated, the effects of the methods on the problems will be discussed, recommendations will be made, and conclusions will be drawn.

Review of the Problem

At the heart of the problem pervading leadership style lies the lack of definitional precision. Style is viewed, depending on the researcher, as needs, orientation, concern, motivation, behavior, or some combination

thereof. These differing perspectives would naturally lead to different underlying assumptions, inconsistent hypotheses based on those assumptions, with resulting confusion in the results and conclusions.

This confusion surrounding style conceptualization is all too apparent in the Bowling (1979) study, and is cited as an example of this definitional problem. The major finding of the study is that relationship behavior is associated with effectiveness in situations characterized by good leader-member relations. "Relationship," however, is a term from Fiedler (1967). He does associate it with style, but style to him means "needs structure." "Behavior" is the definition of style used by Hemphill and Coons (1950) among others. The closest Hemphill and Coons come to Fiedler's "relationships" idea is the term "consideration." But "consideration" and "relationships" are not synonyms. The former refers to behavior and the latter to needs structure, for one thing. For another, "consideration" refers to emphasis on the well-being of the follower group, and "relationships" refers to good leader-member cohesion, a needs criterion of a leader to feel successful. To use the two terms, "relationships" and "needs," in a single conceptual phrase to indicate a variable is simply not definitionally consistent. The variable is measured, moreover, with the Leader Behavior Description Questionnaire, a behavioral rather than a needs instrument.

The situation (good leader-member relations), on the other hand, is described in Fiedler's (1967) terms. It is apparent that the study in question took what was basically a Fiedler finding (a relationships style [need] on the part of the leader is associated with effectiveness in situations characterized by good leader-member relations) and, not discerning the differing perceptions of style, assumed erroneously that Fiedler's conceptualization of style as psychological needs structure could be measured by a behavioral instrument. The tragedy is that this study is not unique in its perceptual problems. It merely serves to illustrate the definitional inconsistencies pervading the literature of leadership style.

Another problem up until now has been the great number of factors associated with leadership style. More than eighty separate names or labels (Table I) have been given to the concepts so associated in the literature. This too has been shown to be largely a consequence of lack of definitional precision.

Clearly a remedy is needed, and has in this paper been prescribed. To an evaluation of this remedy is where the attention of the reader is next directed.

Observations and Evaluation
of Hage's Methods of
Theory Construction

Although Hage had made an important contribution in moving theory construction from the realms of "what needs to be done" to that of "how to do it," his methods are still too abstract to be comprehended and applied by the casual reader or even the researcher.

A few observations concerning the experience of applying Hage's (1972) methodology may be of help to those attempting a similar endeavor. Upon initiating an analysis of the literature it soon became apparent that not all of Hage's techniques were applicable to the specific area (leadership style theory) chosen for this study. Had this been realized at the outset, considerable time could have been saved by starting the literature analysis with general knowledge of the methods, then concentrating on the specific techniques that applied, rather than trying to master all techniques prior to the literature analysis.

A further observation concerns the process itself. It was initially approached as a series of steps, each an entity in itself, to be completed before moving on to the next step. As outlined in Hage (1972), the first step is to discover the general variables, the second

to construct theoretical statements using the discovered general variables, and the third to define the terms. This researcher found it impossible to even discover the general variables, let alone construct statements, without first specifying definitions. When Hage's own applications of his methods (1965; 1980) were consulted, it was found that definitions were indeed discussed before the construction of theoretical statements. However, after perceiving this apparent inconsistency between explanation and application, and after having used the methods for some time, a new insight was gained. The techniques constitute an overall process rather than a series of segmented events. All steps contain elements of each of the others. They had been artificially distinguished simply to facilitate description and explanation, but in reality blended together, overlapping and supporting each other, into an overall whole. When this insight was gained it was refreshing rather than disconcerting to deal with, for example, definitional aspects in all of the four steps utilized in this paper, and likewise to consider the implications of general variables during the entire process.

Another observation is in order concerning Hage's use of examples, verbal illustrations, tables, charts, and diagrams. When these teaching techniques are utilized they are invariably helpful and illuminating. Hage seems to have a gift for communicating through illustration.

Although the quality of these aids are excellent, their quantity left something to be desired in the experience of this writer. Many crucial points, especially concerning the construction and ordering of theoretical statements, were not clear until other works where the techniques had been applied (Hage, 1965; 1980) were consulted and studied in depth.

A concern related to the foregoing is that of lack of detail in explaining some of the methods involved. As a case in point, the technique of definitional reduction is mentioned as a good one and a brief illustration is given (Hage, 1972). This does not, however, seem to do justice to the long hours, days, and weeks spent scrutinizing the literature for intended definitions when much of the time they are not specified, or poring through the dictionary when meanings of concepts measured in the literature are not even addressed, or searching in a thesaurus for a common denominator to use as a label for a definition with several names.

Finally, Hage's references to methodology in his works where his theory construction techniques are applied do not seem sufficient for the reader to evaluate his findings and conclusions on the basis of the methodology employed. For example, the only way that this researcher could evaluate the findings in Hage (1965) was to reconstruct the process leading to those findings based on familiarity with Hage's (1972) techniques of theory

construction.' The present research effort has attempted to overcome that apparent deficiency by chronicling in some detail the application of Hage's methodology along with the findings. Moreover, the lack of attention to description of methodology in Hage's works may be a key as to why his findings have not been hailed with more enthusiasm; they are interesting, researchers may be saying, but not replicable due to lack of methodological precision and detail.

Effects of Hage's Methods of
Theory Construction on
Leadership Style

The following is based on the accuracy of two assumptions: 1) Hage's methods of theory construction selected for use in this study are valid and reliable, and 2) the selected methods have been properly applied in the present research effort. Only to the degree that the foregoing assumptions are accurate can the following observations be justified.

Leadership style has been shown in this study to be a continuum here called leader needs manifestation, with the various perceptions of style -- needs, orientation, concern, motivation, and behavior -- being points along that continuum. With this new perspective the major studies in the field tend to complement rather

than contradict one another. For example, Fiedler (1967) attests that style is unchanging, while Hersey and Blanchard (1972) maintain that style is flexible. However, Fiedler's (1967) style, meaning needs structure, may well be unchanging, but that certainly does not rule out the possibility that Hersey and Blanchard's (1972) style, meaning behavior, is flexible. A leader who merely reacts to his or her needs structure can very possibly be trained to expand leader behavior patterns and thus become more effective in a greater variety of situations. Certainly in other aspects of life people learn to modify their impulses to accommodate social norms, mores, customs, rules, and laws according to the situation. It stands to reason, then, that people can learn to do the same with their leadership behavior even if their needs structure is unchanging. Similarly, Blake and Mouton (1978) claim that the most effective style is one of high concern for both people and task, no matter what the situation, while ~~Hersey and Blanchard~~ (1972), among others, insist that style must be flexible in order to remain effective in differing situations. Nevertheless, Blake and Mouton's (1978) high concern for both people and task across situations seems to be an accurate perception: the concept, like the others, has substantial empirical support. But an increased level of concern does not necessarily mean a change of needs structure, nor does it preclude behavior flexibility when situations change. If the

word style were dropped, and the generic concepts it is used to represent were allowed to come to the forefront, the apparent contradictions between the major schools of thought regarding leadership style all but disappear, and the studies actually tend to complement, if not support, one another.

Another finding of this paper worth noting is that of the more than 80 factors that were associated in the literature with leadership style, only 11 proved to be both definitional entities and correctly associated with style. These 11 conceptual entities, here called general variables, were divided into two categories, and relationships were predicted among them.

With 11 general variables rather than 80 concepts, there is renewed hope that sense can be made of what has been a bewildering pursuit. The inefficiency of conclusions leading nowhere because the premises were faulty, or the frustration of conflicting findings may hereafter be reduced. The anticipated economy of effort and feeling of cooperation rather than controversy among researchers of leadership theory may once again serve to make the goal of reaching new levels of understanding attainable.

Recommendations for Further Research

On the basis of this writer's informed intuition, leader needs and leader motivation did not seem to be operationally distinguishable. This became an underlying assumption in the formulation of the Major Theoretical Statements of this paper; consequently no motivation-level functions of leader needs manifestation appear. After more is known about which statements are empirically supported and about the nature of the relationships that do exist, it would seem useful to explore the possibility of an operational distinction between needs and motivation.

The experience of reducing the number of factors associated with leader needs manifestation to 11 paradoxically raised the question of whether there are more factors so associated that have not yet been recognized in the literature. For example, it has been shown in this paper (Chapter IV, p. 25) that one aspect of leadership style theory and cognitive motivation theory are closely allied. Also, Schriesheim (1978) recognized that expectancy motivation theory affects leadership. (Schriesheim's (1978) ideas are incorporated in the present study as the personal benefits category of leader needs manifestation.) By extension it would seem reasonable that concepts from other theories of motivation -- sociological, physiological, and behavioral, for

example -- may also affect leadership. If motivation concepts indeed affect leadership theory, the question arises as to what other aspects of organizational theory also affect it that have so far gone unrecognized. Communication, decision-making, organizational climate and others may also contain concepts heretofore not regarded as affecting leadership theory. To carry this line of reasoning one step further, what may ultimately be needed is a theory construction approach to the entire spectrum of organizational theory on the micro or social position level, much as Hage (1980) has done on the meso or operations level.

Let it here be noted also that this effort to consolidate and synthesize one aspect of leadership theory constitutes but one-third of what is needed to map the path of the theory as a whole. The other two aspects of leadership theory, situation and effectiveness, are as imprecise as style has heretofore been. A theory construction approach to these two concepts would appear to be needed as much as has been the case with leadership style.

In addition, the results of this paper, to the degree that they are valid, are an evidence in and of themselves that the discipline of theory construction is useful in consolidating and synthesizing social science theory. It is evident also that theory construction is a legitimate source of theoretical statements, ready

to take a place right alongside observation, intuition, experience, and patterned conceptualizations (Kuhn, 1962) as foundation stones of the social science theory. Consequently the continued study of theory construction itself is recommended, with the ends in mind of refining the understanding of the discipline and its methods, and of applying its methods to various fields of social science theory.

Finally, a specific need in the opinion of this writer is a methods text on a more concrete, elementary level than is currently available.

An afterthought is that the field of theory construction may itself now have a sufficient body of literature that a theory construction approach to it may prove worthwhile.

Conclusion

The theory of leadership style has heretofore suffered from lack of definitional precision, inconsistent premises, and resultant contradictory findings. Selected techniques from the discipline of theory construction have been applied to the theory in question, which has resulted in significant consolidation, synthesis, and reformulation. A number of theoretical statements have been constructed and corollaries derived therefrom which may serve as the basis of further research in the field. Research already done that follows in the direction

indicated by the statements and corollaries of this paper have been noted. Recommendations have also been made as to specific research efforts that would seem to logically flow from the findings contained in this paper.

In addition, it has been demonstrated herein that the procedures of theory construction selected for application to leadership style theory are practical and helpful in reducing conceptual inconsistencies and for constructing theoretical statements deserving of empirical analysis.

The writer therefore feels a surge of hope that this effort may point to a way out of the conceptual confusion in which leadership theory finds itself. If such be the case, or if a refinement of this effort be the solution, then the effort to produce it will be more than recompensed.

SELECTED BIBLIOGRAPHY

- Abell, Peter. Model Building in Sociology. New York: Schocken Books, 1971.
- Anderson, J. W. The prediction of combat effective leadership. Unpublished Doctoral Dissertation, University of Washington, 1980.
- Aristotle. Politics in Leadership and the Cult of the Personality. Jane F. Gardner (Ed.) London: Dent and Sons, 1974.
- Ballard, G. E. A study of the perceived most typical and preferred leadership styles of chief administrative officers as indicated by the faculty in the North Carolina College system. Unpublished Doctoral Dissertation, North Carolina State University at Raleigh, 1978.
- Batliss, N. C., and Green, P. C. Leadership style emphasis and related personality attributes. Psychological Reports, 1979, 44, 587-592.
- Bird, Otto. Syllogistic and Its Extensions. Englewood Cliffs, New Jersey: Prentice-Hall, 1964.
- Bivona, J. J. The relationships of cognitive style to the leadership effectiveness of community education coordinators. Unpublished Doctoral Dissertation, University of Connecticut, 1980.
- Blake, R. R., and Mouton, J. S. The New Managerial Grid. Houston: Gulf Publishing, 1978.
- Blalock, H. M. Jr., and Blalock, A. B. Methodology in Social Research. New York: McGraw-Hill, 1968.
- Blau, P. M., and Scott, W. R. Formal Organizations: A Comparative Approach. Scranton, Pennsylvania: Chandler Publishing, 1962.
- Bowers, D. G., and Seashore, S. E. Predicting organizational effectiveness with a four-factor theory of leadership. Administrative Science Quarterly, 1966, 11 (2) 238-263.

- Bowling, N. K., A study of the relationships among leadership behavior, leader-member relations and leadership effectiveness in secondary schools. Unpublished Doctoral Dissertation, University of Cincinnati, 1979.
- Carnie, C. J. Leadership styles of principals in higher and lower achieving ESEA Title I schools. Unpublished Doctoral Dissertation, University of Southern California, 1979.
- Cattell, R. B., Eber, H. W., and Tatsuoka, M. M. Handbook for the Sixteen Personality Factor Questionnaire (16PF). Champaign, Illinois: Institute for Personality and Ability Testing, 1970.
- Chemers, M. M., and Skrzypek, G. J. Experimental test of the contingency model of leadership effectiveness. Journal of Personality and Social Psychology, 1972, 24 (2) 172-177.
- Csoka, L. L. A relationship between leader intelligence and leader rated effectiveness. Journal of Applied Psychology, 1974, 59 (1) 43-47.
- Cummins, R. C. An investigation of a model of leadership effectiveness. Unpublished Doctoral Dissertation, Purdue University, 1970.
- Dansereau, F., Graen G., and Haga, W. J. A vertical dyad linkage approach to leadership within formal organizations. Organizational Behavior and Human Performance, 1975, 13, 46-78.
- Doyle, W. J. Effects of achieved status of leader on productivity of groups. Administrative Science Quarterly, 1971, 16 (1) 40-50.
- Dubin, Robert. Theory Building. New York: Free Press, 1969.
- Durkheim, Emile. The Rules of Sociological Method. Sarah A. Solovay and John H. Mueller (Trans.). George E. G. Catlin (Ed.). Glencoe, Illinois: Free Press, 1950.
- Faisal, C. S. Integrated sociological theory construction: from formulation to verification. Unpublished Doctoral Dissertation, Iowa State University, 1977.

- Fiedler, F. E. A Theory of Leadership Effectiveness. New York: McGraw-Hill, 1967.
- Fiedler, F. E. The effects of leadership training and experience: a contingency model interpretation. Administrative Science Quarterly, 1972, 17 (4) 453-469.
- Fields, Corinthian. Leadership style and organizational climate in higher education. Unpublished Doctoral Dissertation, University of Massachusetts, 1980.
- Fralish, M. L. An exploration of the relationship between cognitive complexity and perceived leader behavior in the interpersonal domain. Unpublished Doctoral Dissertation, Georgia State University, 1977.
- Gibbs, J. P. Sociological Theory Construction. Hinsdale, Illinois: Dryden press, 1972.
- Hage, Jerald. An axiomatic theory of organizations. Administrative Science Quarterly, 1965, 10, 289-319.
- Hage, Jerald. Techniques and Problems of Theory Construction in Sociology. New York: Wiley and Sons, 1972.
- Hage, Jerald. Theories of Organizations: Form, Process, and Transformation. New York: Wiley and Sons, 1980.
- Haggerty, D. J. The relationships among organizational climate, leader situation, and the machiavellianism of elementary school principals. Unpublished Doctoral Dissertation, New York University, 1979.
- Halpin, A. W. Theory and Research in Administration. New York: MacMillan, 1966.
- Hemphill, J. K. Situational Factors in Leadership. Columbus: Ohio State University, Bureau of Educational Research, 1949.
- Hemphill, J. K. The leader and his group. Journal of Education Research, 1949, 28, 225-246.
- Hemphill, J. K., and Coons, A. E. Leader Behavior Description. Columbus: Personnel Research Board, Ohio State University, 1950.
- Hersey, P., and Blanchard, K. Management of Human Behavior: Utilizing Human Resources. Englewood Cliffs, New Jersey: Prentice-Hall, 1972.

- Hogan, J. C. Personological dynamics of leadership. Journal of Research in Personality, 1978, 12, 390-395.
- House, R. J., Filley, A. C., and Gujarati, D. N. Leadership style, hierarchical influence, and the satisfaction of subordinate role expectations: a test of Likert's influence proposition. Journal of Applied Psychology, 1971, 55 (5) 422-432.
- Hoy, W. K., and Rees, R. Subordinate loyalty to immediate superior; a neglected concept in the study of educational administration. Sociology of Education, 1974, 47, 268-286.
- Jago, A. G., and Vroom, V. H. Hierarchical level and leadership style. Organizational Behavior and Human Performance, 1977, 18, 131-145.
- Johnson, K. R. Nursing leadership: a comparative study of self-concept, leadership style and leadership effectiveness. Unpublished Doctoral Dissertation, University of Massachusetts, 1976.
- Kaufman, T. A. A comparison of leadership styles with organizational climate and student achievement in selected secondary schools. Unpublished Doctoral Dissertation, University of Northern Colorado, 1979.
- Kuhn, T. S. The structure of scientific revolutions. International Encyclopedia of Unified Science. Eds. O. Neurath, R. Carnap, and C. Morris. Chicago: University of Chicago Press, 1962.
- Lord, R. G. Functional leadership behavior: measurement and relation to social power and leadership perceptions. Administrative Science Quarterly, 1977, 22, 114-133.
- Misumi, J., and Seki, F. Effects of achievement motivation on the effectiveness of leadership patterns. Administrative Science Quarterly, 1971, 16 (1) 51-60.
- Mitchell, T. R. Leader complexity and leadership style. Journal of Personality and Social Psychology, 1970, 16 (1) 166-174.
- Parsons, Talcott. The Structure of Social Action. New York: McGraw-Hill, 1937.
- Perkins, R. D. Executive leadership in organizations. Unpublished Doctoral Dissertation, Colorado State University, 1971.

- Reddin, W. J. Managerial Effectiveness. New York: McGraw-Hill, 1970.
- Reese, R. L. Leadership effectiveness of high school principals. Unpublished Doctoral Dissertation, University of Southern California, 1973.
- Reynolds, P. D. A Primer in Theory Construction. New York: Bobbs-Merrill, 1971.
- Rossel, R. D. Instrumental and expressive leadership in complex organizations. Administrative Science Quarterly, 1970, 15, 306-316.
- Schriesheim, C. A. Development, validation, and application of new leadership behavior and expectancy research instruments. Unpublished Doctoral Dissertation, Ohio State University, 1978.
- Shapira, Zur. A facet of analysis of leadership styles. Journal of Applied Psychology, 1976, 61 (2) 136-139.
- Silver, P. F. Principals' conceptual ability in relation to situation and behavior. Educational Administration Quarterly, 1975, 11 (3) 49-66.
- Stinchcombe, A. L. Constructing Social Theory. New York: Harcourt, Brace, and World, 1968.
- Stogdill, R. M. Personal factors associated with leadership: a survey of the literature. Journal of Psychology, 1948, 25, 35-71.
- Stogdill, R. M. Individual Behavior and Group Achievement. New York: Oxford University Press, 1959.
- Stogdill, R. M. Handbook of Leadership: A Survey of Theory and Research. New York: Free Press, 1974.
- Weber, Max. On the Methodology of the Social Sciences. Edward Shils (Trans.). Glencoe, Illinois: Free Press, 1949.
- Wennergren, J. A. The relationship between personality factors of school building principals in Monterey County and effective leadership as perceived by their subordinates. Unpublished Doctoral Dissertation, Utah State University, 1971.
- Zetterberg, H. L. On Theory and Verification in Sociology. Totowa, New Jersey: Bedminister Press, 1963.

APPENDIX

THE PROCESS OF ASSIGNING CATEGORIES TO THE FUNCTIONS OF LEADER NEEDS MANIFESTATION: FROM FIRST TO FINAL DRAFT

The sheer bulk of factors associated with leader needs manifestation suggested the need for some type of classification system in order for the information to be further analyzed. The first step was to search for categories. Beginning with the first factor on Table I (p. 29), the question, "What is that?" was asked concerning each factor. For example, decision-making (Anderson, 1980) seemed to be a leader ability and so the category abilities was formed. Autocratic and democratic (Ballard, 1978) were categorized as behaviors. Tough/tender-mindedness (Batlis and Green, 1980) seemed to be a personality factor, so the category personality traits was formed. This process continued until Table I was classified into categories labeled behaviors, attributes, personality factors, needs structure, values system, orientations, tolerances, abilities, confidences, and motivation patterns.

A search was then made for general variables between categories. It soon became apparent that the category labels were not adequate; some needed to be subdivided, others consolidated. Another early draft of Table II (p. 31) had the categories of leader needs manifestation labeled as behaviors, tasks, concerns, needs, situation of leader (as differentiated from group situation), and traits. For a time another category, leader characteristics, attempted to consolidate personality factors, needs structure, values, tolerances, confidences, motivation patterns, and behavior. In another draft behavior was incorporated into leader abilities. Still another version consolidated values system under traits, and motivation patterns, tolerances, and confidences under leader perspectives. Concerns on one occasion was subdivided from behaviors. Behavior and leader situation were the only two categories in yet another attempt. Traits were at one time subdivided into inherent and perceived classifications. After the general variable needs manifestation was discovered Table II was reworked to include the factors associated with the steps of needs manifestation -- needs structure, concern, orientation, motivation, and behavior -- under one category, labeled functions. It then became obvious that the search for general variables was fruitless until the theoretical definitions of the concepts in question were specified. A theoretical definition for each category label was

consequently derived, based on the dictionary, the thesaurus, intended meanings in the literature, and this writer's own intuitive judgment. This exercise showed that the writer's preconceived notions of what a label means and the derived theoretical definition of the same term are not always equal. (This insight proved invaluable in discovering the general variables within categories, the theoretical definitions being specified much earlier in the latter process.) During the search for theoretical definitions between categories (as distinguished from the later search within categories) it was also found that the research authors were not united as to what constituted, for example, a trait, an attribute, a characteristic, an aspect of leader situation, or an ability. Consequently, later drafts of Table II reflect consolidation based on definitional reduction techniques -- the process of searching for different terms occupying the same conceptual space -- applied to the ambiguous terms. Functions, characteristics, personality traits, abilities, and achievements were the categories on the next draft.

No general variables between categories were apparent as yet, so the search for general variables was begun within categories. When the factor expertise (experience and intelligence) was theoretically defined it seemed reasonable that many of the factors under characteristics, and all of the factors under abilities and achievements

could be more efficiently classified under the new concept. The remainder of the factors under characteristics could also be considered personality traits, and so the final draft of Table II was labeled functions, personality traits, and expertise.

After the process of discovering the general variables within categories was completed, however, and because of the definitional precision that was a prerequisite to their discovery, it was noted that the term expertise was not sufficiently precise for continued analysis. Consequently the category was subdivided into attributes, personal benefits, relationships with superiors, and strategies, as shown in Table VI (p. 53).

As explained in the main body of the paper, the factors under the category labeled strategies were in reality subcategories of functions (Table VII, p. 54). Also, relationships with superiors was shown to be a factor of situation rather than needs manifestation. The final categories, then, of factors associated with leader needs manifestation are functions, attributes, and personal benefits.

It may be useful to note that the tables and the figure each went through a metamorphosis similar to that of Table II in order to appear in this paper in their present form.

VITA 2

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Major Field: Higher Education

Biographical:

Personal Data: Born 14 May, 1942, in Chicago, Illinois, the son of E. Daniel Boyce and Echo B. Boyce. Raised in Pacific Grove, California. Married Christine Layer, 1966, and children are David, Suzanne, Deborah, Daniel, Matthew, Jennifer, Rebekah, and Rachelle.

Education: Graduated from Pacific Grove High School, Pacific Grove, California, in June, 1960; attended Monterey Peninsula College, Monterey, California, 1969-61; received the Bachelor of Arts degree, with a major in Spanish, from Brigham Young University in May, 1967; received the Master of Arts degree from Brigham Young University, with a major in Spanish (teaching emphasis), in August, 1975; completed the requirements for the Doctor of Education degree at Oklahoma State University in July, 1983.

Professional Experience: Missionary, The Church of Jesus Christ of Latter-day Saints, Peru, 1961-64; Instructor, beginning and intermediate Spanish, Brigham Young University, Provo, Utah, 1964-67; Instructor, Mt. Ogden Junior LDS Seminary (secondary level religious education), Ogden, Utah, 1967-68; Principal, Central Junior LDS Seminary, Ogden, Utah, 1968-70; Instructor, Bonneville LDS Seminary, Ogden, Utah, 1970-72; Director, LDS Institute of Religion (college level religious education), Stillwater, Oklahoma, 1972 - present.