

PATTERNS OF LEADERSHIP STYLE
AND WORKER SATISFACTION

Thesis for the Degree of M. A.
MICHIGAN STATE UNIVERSITY
John Stephen Heinen
1970

THESIS



3 1293 10442 7624

LIBRARY
Michigan State
University

ABSTRACT

PATTERNS OF LEADERSHIP STYLE AND WORKER SATISFACTION

By

John Stephen Heinen

During the last decade volumes of data have been collected to establish relationships between leadership styles and subordinate satisfaction. Most of this research has attempted to demonstrate that consideration of employees or participation in decision making has a beneficial effect upon subordinate satisfaction (MacGregor, 1960; Likert, 1961, 1967; Argyris, 1964). To date, most psychologists have had difficulty establishing consistent relationships between the supervisor's leadership style and subordinate satisfaction. Even less has been accomplished in determining the dynamics of these relationships.

Two methodological variations in this study have made several substantial additions to a role theory analysis of the supervisor-subordinate relationship. In this study 25 supervisory employees and 147 nonsupervisory employees from a medium-sized insurance company filled out separate forms of a questionnaire. The questionnaires for both groups were identical except for a set of leadership questions. Complementary data was obtained from both

supervisory employees and the subordinates of each supervisor on the supervisor's leadership role behavior. Supervisors completed an adapted form of the Nelson Leadership Inventory (1949) on their own behavior, while the employees answered a parallel set of questions (Trumbo, 1958) concerning their own supervisor.

Second, in categorizing the perceived leadership styles, the employee's pattern of responses to the leadership index were used rather than his modal response in a particular category. Thus a supervisor could not only be considered as a bureaucratic or a democratic leader, but also he could be categorized as a bureaucratic-autocratic leader. The data revealed that most people reported their supervisors as using some "mixed" leadership style rather than any "pure" leadership style.

Several important findings emerged from this investigation. First, subordinates seldom reported their supervisors to be using the leadership style that he reported. Supervisors tended to report themselves as being idiocratic or democratic leaders; whereas, subordinates reported the supervisors to be more autocratic. This discrepancy was so consistent throughout to suggest that there existed a set of norms within each group concerning supervisory behavior.

Employee job satisfaction and satisfaction with the supervisor were correlated with both the supervisory and the subordinate perceptions of the supervisor's leadership style. None of the measures of subordinate satisfaction were found

John Stephen Heinen

to be related to the supervisor's perceptions of leadership style; but all were strongly related to the subordinate's perceptions of leadership style. When the subordinate perceived the democratic or idiocratic leadership styles, his satisfaction was the highest. When the subordinate perceived the autocratic or bureaucratic leadership styles, his satisfaction was the lowest. The degree of satisfaction associated with the "mixed" leadership styles was almost as high as that associated with the democratic or idiocratic leadership styles.

The amount of agreement between the report of the supervisor and the report of the non-supervisory employee about the supervisor's leadership style has no significant relationship to employee satisfaction.

From this investigation it appears that the role relationship established between the supervisor and the subordinate is related to subordinate satisfaction. The role expectations and perceptions of supervisors and subordinates both contribute to subordinate satisfaction. A model is presented for extending this analysis by more explicitly identifying how the role relationship of supervisor-subordinate contributes to subordinate satisfaction.

Approved:

Date:



February 23, 1970

Dissertation Committee:

E. Jacobson, Chairman

J. Wakeley

L. Messé

PATTERNS OF LEADERSHIP STYLE
AND WORKER SATISFACTION

By

John Stephen Heinen

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF ARTS

1970

2640
21.01.77

To my mother and father

ACKNOWLEDGEMENTS

Credit must go to many people for their help in completing this thesis. Certain people merit special consideration.

I am greatly indebted to my thesis chairman and advisor, Dr. Eugene Jacobson. His untiring patience, understanding, and careful direction has steered me through my entire graduate education. Only with his constant advice has this thesis finally reached fruition.

To the other members of my committee, Dr. Lawrence Messé and Dr. John Wakeley, I would also like to extend my gratitude. Both members offered poignant comments concerning my thesis and helped to improve the quality and accuracy of my work.

Several graduate students also assisted me in my efforts. Gerry Gillmore was extremely helpful in the analysis of the data. He devised for me all the computer programs needed to analyse the data. Doug Little offered useful suggestions for the theoretical design of the study.

Without the previous work of Don Trumbo, John Nangle, Gloria Cheek Kamenske, Dr. Einar Hardin, and Dr. William Faunce this project would not have been possible. Their excellent work in designing their study of automation and extensive data gathering set the stage for this research problem.

I would like to thank my wife, Jean, for her long hours of typing. Her loving support also carried me over many periods of frustration during the project.

Finally, I want to thank my parents. Through their great sacrifice and encouragement it was possible for me to reach this milestone in my education.

TABLE OF CONTENTS

	Page
LIST OF TABLES	vii
LIST OF FIGURES	x
 Chapter	
I. History of the Psychological Study of Leadership.	1
Leadership Style	2
Ohio State Leadership Studies	3
University of Michigan Leadership Studies	4
Fiedler	7
Nelson	7
Comparison	8
II. Application of Role Theory to Organizations	14
Role Theory Model	15
Agreement Between Supervisor and Subordinate	20
Different Styles of Supervision	23
Satisfaction	25
III. Research Site and Data Gathering	30
Companies	30
Studies Using these Data	31
Sample	32
Definition of Leadership Style	32
Index of Leadership Style	32
Length of Time with the Company	35
Length of Time with the Supervisor	35
General Job Satisfaction	35
Specific Job Satisfaction	35
Satisfaction with the Supervisor	36

Chapter	Page
IV. Comparison of Supervisors and Employees on Leadership Style Index	37
V. Relation of Satisfaction Measures to Leadership Style and to Agreement Between Supervisor and Subordinate	58
Employee Satisfaction as a Function of Leadership Style as Perceived by the Supervisor	60
Leadership Style Perceived by the Employee	63
Employee Satisfaction as a Function of the Agreement between Supervisor and Employee on Leadership Style	68
Employee Satisfaction as a Function of both Leadership Style and Degree of Agreement .	72
VI. Discussion of Results	77
VII. Role Theory of Leadership Style	97
BIBLIOGRAPHY	106
Appendix	
A. Bibliography	110
B. Questionnaire Items	112
C. Frequency of Responses to 10 Item Leadership Style Index	119
D. Individual Scores on Each Index	120
E. Classification of Supervisors into Leadership Style	125
F. Classification of Employees According to Their Perception of Supervisor's Leadership Style . .	126

LIST OF TABLES

Table	Page
I. Specific Job Satisfaction Index	36
II. Range of Scores (Nelson)	38
III. Range of Scores (Trumbo)	39
IV. Range of Scores (Heinen)	39
V. Mean Supervisor's Response to Each Leadership Category	40
VI. Mean Employee's Response to Each Leadership Category	40
VII. Difference in Mean Responses of Supervisors and Employees to Each Leadership Category . .	41
VIII. Kuder-Richardson Correlation Coefficients of the Consistency of the Ten Items	45
IX. Kuder-Richardson Correlation Coefficients of the Consistency of Subjects in Each Situation	45
X. Correlation Between the Supervisor and His Employee Work Group on Nelson Leadership Style Index	48
XI. Means and Variances of Difference Scores of Employees in Actual Work Groups	53
XII. One-way Analysis of Variance of Difference Scores of Employees in Actual Work Groups . .	54
XIII. Means and Variances of Difference Scores of Employees in Groups Based Upon Supervisors' Perception of Leadership Style	54
XIV. One-way Analysis of Variance of Difference Scores of Employees in Groups Based on Supervisors' Perception of Leadership Style .	55

Table	Page
XV. Means and Variances of Difference Scores of Employees Perceiving Themselves Under Various Leadership Styles	56
XVI. One-way Analysis of Variance of Difference Scores of Employees in Groups Based on Employees' Perception of Leadership Style . .	56
XVII. Employee's General Job Satisfaction as a Function of the Leadership Style as Perceived by the Supervisors	60
XVIII. Employee's Specific Job Satisfaction as a Function of the Leadership Style as Perceived by the Supervisors	60
XIX. Means and Variances of Job Satisfaction as a Function of the Leadership Style Perceived by the Supervisor	61
XX. Means and Variances of Employee Satisfaction with the Supervisor as a Function of the Leadership Style Perceived by the Supervisor	62
XXI. Employee Satisfaction with the Supervisor as a Function of the Style of Supervision Perceived by the Supervisor	62
XXII. Means, Variances, and Ranks of Means of Employee Satisfaction for Groups based upon Leadership Style Perceived by the Employee .	64
XXIII. Employee General Job Satisfaction as a Function of the Supervisor's Leadership Style Perceived by the Employee	64
XXIV. Employee Specific Job Satisfaction as a Function of the Supervisor's Leadership Style Perceived by the Employee	65
XXV. Employee's Satisfaction with Their Supervisor as a Function of the Supervisor's Leadership Style Perceived by the Employee	65
XXVI. Mean Ranks for Satisfaction of Employee Groups based on the Leadership Style Perceived by the Employee	67
XXVII. General Job Satisfaction of Employees as a Function of the Quartiles of Work Group Difference Scores	69

Table		Page
XXVIII.	Specific Job Satisfaction of Employees as a Function of Quartiles of Work Group Difference Scores	69
XXIX.	Means and Variances of Satisfaction with the Supervisor for Quartiles of Work Group Difference Scores	69
XXX.	Satisfaction with the Supervisor of Employees as a Function of Quartiles of the Work Group Difference Scores	70
XXXI.	General Job Satisfaction of Employees as a Function of the Difference Score of the Employees	70
XXXII.	Specific Job Satisfaction of Employees as a Function of the Difference Score of the Employees	71
XXXIII.	Satisfaction with the Supervisor as a Function of the Difference Score of the Employees . .	71
XXXIV.	Means of Satisfaction Scores for Each Quartile of Employee Difference Scores	72
XXXV.	3 x 2 Analysis of Variance of General Job Satisfaction	74
XXXVI.	3 x 2 Analysis of Variance of Specific Job Satisfaction	75
XXXVII.	3 x 2 Analysis of Variance of Satisfaction with Supervisor	75

LIST OF FIGURES

Figure	Page
1. A Model of the Role Episode	16
2. Diagram of Relationship Between Leadership Style, Agreement and Satisfaction	59
3. A Theoretical Model of Some Factors Involved in Leadership Process	100

CHAPTER I

History of the Psychological Study of Leadership

Leadership has long been a major interest area of psychologists. From the beginning of time, people have existed in various types of leader-follower or superior-subordinate relationships. The research in this area has progressed through many developmental stages. Yet even today there is little understanding about what makes a leader and how he operates effectively.

The initial efforts of psychologists concentrated on determining what traits identified a leader. Very few of these studies conclusively established a trait description of a leader as distinguished from a follower (Stogdill, 1948; Gibb, 1954). Stogdill (1948) in his review of these studies concluded that:

A person does not become a leader by virtue of the possession of some combination of traits, but the pattern of personal characteristics of the leader must bear some relevant relationships to the characteristics, activities, and goals of the followers.

After the trait theory approach failed to establish the traits needed to characterize a leader, many people began to espouse an interactional approach to the understanding of leadership. This theory claimed that several inputs have to be included: (1) the personality of the leader; (2) the followers with their attitudes, needs, and

problems; (3) the group itself both as regards to the structure of interpersonal relations and its syntality characteristics; and (4) the situation as determined by the physical setting, nature of the task, etc. (Gibb, 1954; 1969). Seldom are all these relevant variables included in a single study. Most often leadership research takes the form of identifying the leadership behaviors or leadership style, i.e., the pattern of leadership behaviors, and their subsequent effects upon certain follower variables or characteristics. In order to comprehend the present approach to leadership, a brief history of different theoretical treatments of leadership style is in order.

Leadership Style

The classic contemporary social psychological study of leadership style was the original Lewin, Lippitt, and White (1939) study of boys' groups led by adults. They employed three leadership roles: authoritarian, democratic, and laissez-faire. The authoritarian leader determined all work policies, dictated work tasks and work groups, directed the work one step at a time, kept his criterion for praise and criticism to himself, and remained aloof from the group. The democratic leader, on the other hand, set up all policies, work tasks, and work companions by group decisions, described the overall work process in the initial meeting, was objective in praise and criticism, and tried to become a regular member of the group. The laissez-faire leader was relatively passive and actually

offered little leadership. The results showed that the boys under authoritarian leaders were dependent on the leader and often responded aggressively to each other; whereas the democratic groups were friendly and freer in their suggestions. In the democratic groups there was no change in productivity when the leader left the room; whereas, there was a sharp drop-off in productivity after the authoritarian leader left the room.

This study gave impetus to future studies of leadership style and to investigations of how different leadership styles lead to differential effects upon the group members.

Ohio State Leadership Studies

In 1945, the Bureau of Business Research at Ohio State University developed the Leader Behavior Description Questionnaire (Gibb, 1954). In this questionnaire, Hemphill defines nine dimensions of leadership behavior: (1) initiation, (2) membership, (3) representation, (4) integration, (5) organization, (6) domination, (7) communication, (8) recognition, and (9) production.

Later, Halpin and Winer (1952) using data from studies of air crews, extracted four orthogonal factors from these nine which account for a large amount of the variance.

- (1) Consideration - extent to which the leader, while carrying out his leader functions, is considerate of the men who are his followers.

- (2) Initiating Structure - extent to which the leader organizes and defines the relation between himself and his subordinates or fellow group members.
- (3) Production Emphasis - extent to which the leader stresses getting the job done.
- (4) Sensitivity or Social Awareness - extent that the leader stresses being a socially acceptable individual in his interactions with other group members.

Most of the present researchers in the Ohio State group (Fleishman, 1953; Stogdill, 1965) only include the first two factors in their analyses since these factors account for some 80% of the variance. This then has become their basis for describing leader behavior.

University of Michigan Leadership Studies

Early Survey Research Center - The early studies done at the University of Michigan Survey Research Center developed two basic concepts of leadership style: Production-centered supervision and employee-centered supervision. Production-centered supervisors see that the workers are using the proper methods, are sticking to their work, and are getting a satisfactory volume of work done. Employee-centered supervisors, however, emphasize the human problems of their workers. The supervisor endeavors to build a team of people who cooperate and work well together (Katz et al., 1950; 1951).

Katz and Kahn (1966) elaborated this into four dimensions of leadership:

- (1) Differentiation of Supervisory Role - behavior reflects a greater emphasis upon activities of planning and performing specialized skilled tasks.
- (2) Closeness of Supervision - degree to which the supervisor is checking and monitoring work of employee.
- (3) Employee Orientation - degree to which the supervisor is personally involved with employees.
- (4) Group Relationships - behavior the leader exerts in developing the group process.

This conceptualization has many parallels to the dimensions of leadership described by Hemphill (1966).

Likert (1961, 1967) - Likert has probably been one of the most active contributors in this area. He talks about management in four styles ranging from authoritarian to participative. The systems are: (1) exploitive authoritative, (2) benevolent authoritative, (3) consultative, and (4) participative group. These four systems represent a scheme for classifying organizations on what Likert calls the human dimension of management.

The four systems are based upon five leadership conditions: (1) the use by the manager of the principle of supportive relationships, (2) his use of group decision making and group methods of supervision, (3) his high performance goals for the organization, (4) his technical knowledge, and (5) his coordinating, scheduling and planning.

Likert considers the first principle by far the most important for effective supervision. From his viewpoint it is absolutely essential that the leader be supportive and ego building. He sees the relationship developed between the leader and follower as crucial. There is much research supporting his contentions and it will be referred to later.

Cartwright and Zander (1953) - Cartwright and Zander view leadership as the performance of behaviors which help the group to achieve its desired outcomes, i.e., the leader fulfills group functions. The functions are described in two ways: (1) the achievement of some specific group goal, and/or (2) the maintenance or strengthening of the group itself. This analysis of the leadership situation is much more general than the other descriptive approaches presented in this thesis.

Bowers and Seashore - In their article Bowers and Seashore (1966) have subsumed the previous theoretical styles mentioned into four dimensions.

- (1) Support - Behavior that enhances someone else's feeling of personal worth and importance.
- (2) Interaction facilitation - Behavior that encourages members of the group to develop close, mutually satisfying relationships.
- (3) Goal emphasis - Behavior that stimulates an enthusiasm for meeting the group's goal or achieving excellent performance.

- (4) Work facilitation - Behavior that helps achieve goal attainment by such activities as scheduling, coordinating, planning, and by providing resources such as tools, materials, and technical knowledge.

All the previous authors' formulations overlap with this one.

Fiedler

Fiedler (1967) makes a distinction in style similar to the original Survey Research Center formulation. He talks about a task oriented style and a relations oriented style. However, he mainly is trying to achieve a reconciliation between trait theory and the situation. Style for him is a function of the situation and the leader's ability to exert his influence.

Nelson

Nelson (1949) developed a system for classifying leadership style in terms of the way the leader defines his role based upon his internalized attitudes. He views the styles according to this type of classification:

- (1) Dependent (Bureaucratic) Type - leader seeks security and avoids responsibility by following management's rules and regulations literally and routinely. He avoids interaction with workers by withdrawal into office activities and only infrequent impersonal contacts with his men.
- (2) Self-sufficient (Autocratic) Type - leader seeks power and responsibility through his own industry, initiative, ability, and technical knowledge. He

makes his workers dependent upon him by his rather limited, critical, detailed one-way communication which does not develop their initiative.

- (3) Manipulative (Idiocratic) Type - leader seeks personal advancement by his ability to handle individuals effectively and get out high production. He has a superficial two-way interaction with the workers through his rather frequent, friendly contacts to stimulate interests and activity.
- (4) Integrative (Democratic) Type - leader seeks recognition and participation for himself and his group in the control of his department. He maintains frequent, frank and informal, sincere, two-way interaction with the workers in developing group codes, standards, and goals.

Comparison

Several aspects should be considered in comparing these different approaches to the classification of leadership style. One characterization can be made on the basis of the distinction previously made between leadership behaviors and leadership style. Leadership style was defined as a pattern of leadership behaviors. The formulations of the Ohio State group, Katz and Kahn, Cartwright and Zander, and Bowers and Seashore, discriminate between leaders on the basis of separate and distinct classes of behavior. Fiedler's conceptualization begins to move in the direction

of patterns of leadership behavior. His attempts to integrate supervisory behaviors with situational demands are commendable. However, this system relies strongly upon his measure of the leader's evaluation of the Least Preferred Co-worker (LPC score). The meaning of this measure, especially in behavioral terms, is ambiguous. Thus this formulation has not won wide acclaim among other theorists investigating leadership style.

Only Likert and Nelson attempt to talk about leadership style in the manner in which it is defined in this thesis. Both theorists offer a classification which describes different patterns of behavior. Underlying each of their leadership style categories is a set of conditions or classes of behaviors. Rather than discriminate between leaders on the basis of specific behaviors, they consider each class of behavior and assess the degree to which the leader performs that behavior. The combination of behaviors across all these conditions defines each of the four leadership styles or patterns which Likert and Nelson employ.

Although both classification systems are nominal schemata, they begin to establish a basis for the ordering of leaders and leadership style. With respect to any one class of behaviors, the patterns of leadership can be arranged in a definite order. For example, on the dimension of communication the leadership styles can be arranged from the bureaucratic leader who avoids communication with his employees, to the autocratic leader who develops one-way

communication with his employees, to the idiocratic leader who develops a superficial two-way communication with each person, to the democratic leader who develops a sincere three-way communication with the members of the work group and between workers. The degree to which a leader possesses certain characteristics or performs some set of behaviors can be described, rather than a simple all or none classification of behaviors. The demonstration of the grouping of different behaviors into a single style and a glimpse at how these separate behaviors interact with one another becomes possible.

In order to consider adequately the numerous variables necessary to develop an interactional approach to the study of leadership, it is necessary to propose a formulation which allows one both to order leadership behaviors and to combine leadership behaviors to evaluate their interactional effects. Formulations which only describe different classes of behavior which the leader performs can make no statements about how the different classes of behavior join together. No statements can be made as to why certain combinations of behaviors exist nor the resulting effects of them. Only the Likert and Nelson formulations allow for comparisons across and discriminations between leaders, and the establishment of referents for leader interactions with subordinates.

The Likert system suggests one important theoretical problem. Inherent in his theory is the idea that there exists one best leadership style for all situations.

Given the complexities discussed previously, this idea seems too oversimplified. This seems analogous to the error committed by the early psychologists who tried to establish a specific set of characteristics to define a leader. It assumes that the personality of the leader, the attitudes, needs, and problems of the followers, the structure of interpersonal relationships of the group, and the situation itself are responsive to only one style of leadership.

In Likert's eyes the most effective way to run an organization is from a participative management viewpoint. This parallels our political beliefs about democracy and thus has won wide acclaim.

However, this formulation does not seem to work in every situation. It seems to oversimplify the relationships among people and present only negative aspects of all other styles.

Albrook (1966) in a review of several studies found that participative management does not seem to work with all people and in all situations. Participative management would not be the most effective means of handling situations in which: (1) interaction is restricted; (2) the tasks are complex; (3) permissiveness is in some way restricted by higher authorities; (4) maximum productivity is demanded; (5) the expectations of the subordinates differ; (6) the personalities and abilities of the subordinates interfere; (7) the personality and expectations of would be permissive leaders is contradictory; and (8) emergencies (Bass, 1965). Especially important are points 5, 6, and 7 because

they deal with the relationships between the superior and subordinate. It seems inconceivable to expect that these differing expectations, personalities, and abilities of the leader and the follower can always be accommodated best by a single style of behavior. This type of evidence has led William Eddy (1962) to comment:

It is evident from all the evidence brought to bear on the problem that no one method of control can be shown to be totally effective. The evidence is that individual variability, individual differences in personality traits, group characteristics, kind of task being carried out, situational demands, and other factors interact with the characteristics of management's methods to determine effectiveness of performance.

These considerations of the complexity of leadership situations and the multitude of variables in the interaction of several people make it difficult for one to accept a single best style approach to leadership style. Therefore, an approach which is not systematically biased in favor of one style over another should be used in constructing a theoretical schema.

Through comparison of the various conceptualizations certain theoretical requirements have been established. In order to recognize the complexities of the leadership situation, an interaction approach to the study of leadership is essential. This approach should attempt to distinguish between patterns of behavior rather than simply to identify the presence of a behavior. For only in this way can one progress toward the ordering of leadership behaviors and establishing the referents of the interpersonal relations

between leader and followers. In addition this approach should allow for an unbiased reflection of the interaction components rather than favor one style over another. Of all the systems compared, only Nelson's formulation satisfies them all.

Implicit in all these statements are several additional important considerations that recommend Nelson's system. Given the arguments in favor of a truly interactional approach and those opposed to a single best style approach, it follows that (1) different people can employ different styles of supervision in any given situation, and (2) the same person can employ different styles of supervision in different situations. Nelson (1949) demonstrated that use of the different supervisory styles was not a function of the supervisor's age, education, length of time with the company, his experience or rank, nor was it a function of the age, sex, race, education, or skill of his work group. Therefore, it seems that the style of leadership employed is not specific to particular types of people with certain characteristics.

Fiedler (1967) attempts to establish through several of his studies how the leader can analyse the situation and match his strengths and weaknesses to the demands of that situation. With this type of approach and allowance for certain of the complexities of the leadership situation in specific terms, additional advances in theory building can be attempted.

CHAPTER II

Application of Role Theory to Organizations

Using the different schemes for classifying leadership style, investigators have attempted to show the effects of leadership upon supervisors and subordinates. Very few studies of leadership style actually look at the interrelationship of supervisor with subordinate. Almost all investigators of leadership behavior have relied upon the reports of the employees to describe their supervisors' behavior (Likert, 1961, 1967; Stogdill, 1965). Several have used measures of the supervisor-employee relationship to determine its effects upon the supervisors (Nelson, 1949; Vroom, 1960), but seldom the reciprocal effects upon both the supervisor and the employee.

Katz and Kahn (1966) state: "Leadership is a relational concept implying two terms: the influencing agent and the persons influenced." This definition suggests that the reports of supervisory behavior and the associated attitudes and characteristics of both the supervisors and subordinates should be included in any study of leadership style. In order to understand this double influencing relationship, complementary data from both supervisors and employees are required.

Gibb (1954) in commenting on the interactional theory, notes that very few recognize the importance of the leader's perception, the follower's perception, and the group's perception of themselves and others in relation to the variables of leadership style. At that time he recognized no theory capable of filling this void.

Role Theory Model

Within the last few years there has been an increase in the application of role theory to the study of organizations. These efforts have been stimulated by Katz and Kahn (1966) The Social Psychology of Organizations and by Kahn et al. (1964) Organizational Stress. Both of these works build upon the efforts of Linton (1936), Newcomb (1950), Parsons (1951), and Rommetveit (1954). Linton (1936) linked role to the definition of status. He defined status as a position in a social system occupied by designated individuals and role as the behavioral enacting of the patterned expectations attributed to that position. In 1950, Newcomb used these terms in elaborating the framework of social psychological theory. He was interested in roles and role relationships. Role relationships are based upon the behavioral and attitudinal relationships among the occupants of particular roles. Finally Rommetveit (1954) elaborated a model of role relationships which served as the basis for both the Katz and Kahn and the Kahn et al. approach. This model will also serve as the basis of this investigation and will be discussed later.

Katz and Kahn (1966) have defined organizations as open social systems. At the social psychological base of these systems are the role behaviors of the members, the norms prescribing and sanctioning these behaviors and the values in which the norms are embedded. Their application of this theoretical perspective to the analysis of organizations and the application of the model to the study of role conflict within organizations suggests a fruitful approach to the study of leadership style. With further investigation and elaboration this model may serve as an integrative force in organizational theory.

Rommetveit (1954) developed his model of interpersonal relations based upon the expectations of the role sender and role receiver. Each behavioral activity forms a complete unit or role episode (see Fig. 1) and is broken down into four parts: role evaluation, sent role, received role, and role behavior.

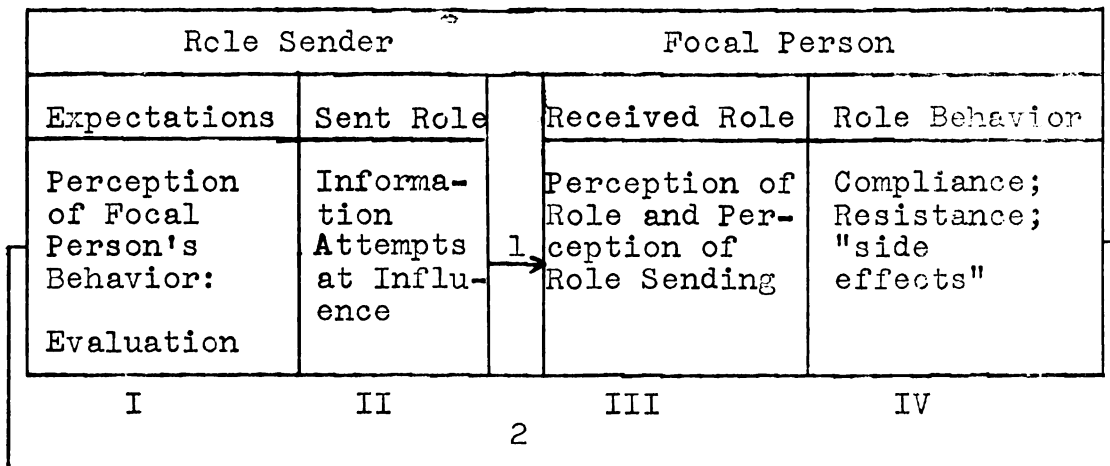


Fig. 1 A Model of the Role Episode (adapted from Katz and Kahn, 1966).

Role evaluations - are the evaluative standards applied to the behavior of any person who occupies a given organizational office or position.

Sent role - consists of the communications stemming from role expectations and sent by a member of the role set as he attempts to influence the focal person.

Received role - the focal person's perception of the role sendings addressed to him, including those he "sends" to himself.

Role behavior - the response of the focal person to the complex of information and influence he has received

With this model in mind, one proceeds to a more specific look at the relationship between the leader and the follower. Nelson (1949) was concerned primarily with the way the leader defined his institutional role. He developed his styles of leadership upon the assumption that any established leadership process will develop a pattern of social interaction based upon a common set of expectations. These patterns of interaction result in the expectation or behavioral tendency developed in the leader as a product of experience with his group. Jacobson (1967) views these styles of leadership as training situations and the leaders in a constant training role. They train the subordinate in what to expect in the superior-subordinate relationship and how to behave. At the same time Katz and Kahn (1966) assert that each individual responds to the organization in terms of his perceptions of organizational activities,

which may not correspond to the actual organizational behaviors. Accordingly, every individual will respond to the training of his supervisor in terms of his own perceptions of the supervisor's behavior, which may not accurately reflect that training.

This study applies role concepts to an analysis of leadership style. Contemporary role theory is based on exploration of the different ways in which members of an interacting group perceive each other's performance and influence each other through expectations about the other's performance. The interaction theory of leadership style, discussed previously, deals with a specific type of interacting role relationships. The supervisor in his role of leader influences the subordinate in particular ways. The Rommetveit model is concerned with the transmission of expectations for role behavior. In that model the supervisor as role sender has a set of prescriptions and proscriptions for the subordinate role, while the subordinate, as role receiver, perceives what the supervisor expects of him. This thesis will focus more upon the supervisory role and role behaviors and only implicitly on expectations for the employee role. The supervisor's leadership style is a means of defining the supervisor's own role vis-a-vis the employee. His behavior serves as a cue to the subordinate as to what is expected of him in certain situations. In most organizations the proper role behavior for a subordinate is usually learned on the basis of inference from

others' behaviors rather than through any direct attempts at transmitting expectations to him. This study will look at how the different cues provided by the supervisor's role behavior are perceived in supervisor-subordinate relationships.

Supervisory role behavior acts as the means by which the leader communicates or trains each of his followers in relation to the "do's and don'ts" associated with his office. From the Jacobson viewpoint of leadership style, the supervisor uses particular styles in order to communicate role expectations for the subordinate role. A supervisor's leadership style indicates the type of relationship he is attempting to establish with his subordinates. The manner in which he perceives his own leadership style defines the role relationship he is trying to establish with his subordinate.

On the other hand, the subordinate has certain perceptions and cognitions of the cues he receives from the supervisor's role behavior. His perceptions of these cues give him implicit directives as to what his relationship to the supervisor should be. A subordinate's perceptions of the supervisor's leadership style serves as a basis for his response to his role relationship with the supervisor.

Focusing upon the supervisor's role will allow an analysis of certain types of responses to the role behavior cues furnished by the supervisor. The directives of a supervisor that are received by subordinates can be studied through an analysis of subordinate reports. Two aspects of

subordinates' reports associated with the supervisor's role behavior will be investigated in this thesis. First, the degree of agreement between the perceptions of the supervisor and the perceptions of the subordinate about the supervisor's leadership style will be determined. Then the relationship between the supervisor's behavior and the subordinate's report of satisfaction with a number of job aspects will be studied. The supervisor's behavior will be indexed both from the reports of the supervisor and the reports of the subordinates.

Agreement Between Supervisor and Subordinate

There is little research on the degree of agreement between supervisors' and employees' perceptions of leadership style. Vroom (1964) suggests that employee reports about their supervisor's behavior are subject to bias based upon their liking for the supervisor. He feels it is necessary to establish a certain degree of agreement between the subordinate's report and other reports of the supervisor's behavior from different sources in order to control the potential bias in these reports.

In evaluating the leadership abilities of a foreman, Besco and Lawshe (1959) found that the perceptions of the subordinates of a foreman in no way correlated with the perceptions of a foreman's superiors. A glaring discrepancy has also been demonstrated between what the supervisor thinks he does and what his subordinates say he does in the area of giving recognition (Likert, 1958).

Vroom (1960), in his dissertation, attempted to distinguish between psychological participation and objective participation for a group of supervisors. He used self-reports of the supervisors as measures of psychological participation. He used reports from peers of the supervisor, subordinates of the supervisor, and superiors of the supervisor as measures of objective participation. Much to his dismay he found no relationship between his measures of objective participation and psychological participation. In fact he found a minor negative correlation between his measure of subordinate reported participation and his measure of the supervisor's psychological participation. He attributes this lack of agreement mostly to the fact that his measures of objective participation are only one item indexes, but this lack of agreement is worth investigation on a larger scale.

The most thorough investigation into the area of agreement between supervisors and employees concerning supervisory behavior is that of Gross (1956). Using time sampling methods, he had observers establish the amount of time each supervisor spent in various activities. Also he had supervisors fill out a checklist denoting the amount of time they spent in each activity. Employees filled out a similar form describing the amount of time their supervisor spent in each of these activities. Gross found no consistent relationship between the observations of the supervisor's behavior and either the supervisor's perception of his own behavior or the employees' perception of the supervisor's behavior.

Also no consistent relationship could be established between the supervisor's perceptions of his own behavior and the employees' perception of the supervisor's behavior.

The Gross study is similar to the study to be reported here with the exception that Gross examined the amount of time spent in various activities rather than the leadership style involved. The first hypothesis to be tested is derived from the findings described in the paragraphs above.

Hypothesis I. There will be a lack of agreement between the supervisor's perception of his own leadership style and his employees' perception of the supervisor's leadership style.

The supervisor has been described by Jacobson (1967) to be in a training role. The training of the employee in the expectations and behavior of his supervisor is a learning situation, and thus follows learning principles. The employee will know the expectations of his supervisor only after repeated contacts with the supervisor. His learning of these expectations should proceed according to the standard curves of learning performance. Increasing the length of time a person is with the company and increasing the length of time a person works with a particular supervisor should increase the probability of agreement between the supervisor's and employee's perception of the supervisor's leadership style.

As the length of time he has been with the company increases, the subordinate's ability to perceive correctly the supervisor's style of leadership should be facilitated by the subordinate's increased knowledge of company

policies, both formal and informal. This information should allow the employee to understand some of the expectations and pressures operating on the supervisor in his dealing with the employees.

In addition, working with a particular supervisor for a long time affords the employee the opportunity to interact with the supervisor in different situations a number of times. These interactions more clearly establish the specific expectations the supervisor holds. The more chances an employee has to experience and verify the supervisor's expectations and behavioral patterns, the more accurate he will be in his perceptions of the supervisor's leadership style.

Hypothesis II. The longer a subordinate works with a company, the greater will be the agreement between the supervisor's perception of his leadership style and the employee's perception of the supervisor's leadership style.

Hypothesis III. The longer a subordinate works with a particular supervisor the greater will be the agreement between the supervisor's perception of his leadership style and the employee's perception of the supervisor's leadership style.

Hypothesis IV. The agreement between the supervisor's and employee's perception of the supervisor's leadership style will be greater for employees with the supervisor a long time than for those with the company a long time.

Different Styles of Supervision

Not all persons have the same expectations about a given role position. The role involves a range of different behaviors. Similarly for the leadership role there is not a single set of expectations for all role occupants.

Nor does each role occupant have the same set of expectations for each situation. These points are often overlooked in the analyses of leadership style. Generally, leaders are grouped into categories of leadership style on the basis of their modal responses to questions about leadership behavior. This practice ignores the complexities of the leadership situation. In this study, each supervisor will be identified on the basis of his total pattern of responses across the entire Nelson Index, i.e., the set of questions based upon Nelson's theory of leadership style. In this study an adaptation of the Nelson Index devised by Trumbo (1958) was used. One of the questions used was:

- When hiring a new employee, the supervisor should select a man who is:
1. intelligent and has a good deal of drive.
 2. a hard worker and who doesn't need much supervision.
 3. open-minded and willing to share responsibilities.
 4. agreeable and willing to follow the regulations.

In defining their leadership role, some supervisors report only a limited range of expectations and behaviors that consistently reflect a specific pattern. Other supervisors choose a broad range of expectations and behaviors to match different situations. The former group is labeled as using a uniform leadership style because they report only a limited range of the total supervisory behaviors; the latter is labeled as using a mixed leadership style because they extend their range of behaviors across the spectrum of supervisory behaviors. If the set of expectations and behaviors that the supervisor uses is limited,

then the expectation and behavior patterns that the employee has to learn are limited also. In those cases, employees should find it easier to generalize expectations about the supervisors from one supervisory situation to another.

Hypothesis V. The more uniform is the supervisor's reported leadership style, the greater will be the agreement between his perceptions of his leadership style and the employee's perceptions of the supervisor's leadership style.

Satisfaction

One of the major reasons for investigating role relationships is to determine the impact of differential role expectations. A basic concern has been to establish the relationship between differential role expectations and differential attitudes. The primary purpose of studies in leadership style is to see how various role relationships affect work related attitudes. In almost all studies of leadership style, job satisfaction and satisfaction with the supervisor have been used as dependent measures of the differential effects of leadership style.

A bureaucratic leader's relationships with employees are formal, infrequent, and impersonal. The supervisor's rule-centered approach may lead to apathetic workers who identify neither with the company nor the supervisor.

The authoritarian leader directs the employees in a very detailed and critical manner. They are completely subservient to the leader and may be negative and antagonistic to all his suggestions and actions or may give unquestioning obedience.

Employee relationships under an idiocratic leader are informal. This type of supervisor deals with each person individually. However, the ambition and competition he builds between the workers may modify somewhat their satisfaction with him and the job.

The democratic leader develops a very close relationship with his employees. Through his involvement in the work group, he fosters cooperation and satisfaction among the members.

Recent literature on leadership styles and satisfaction have proposed similar relationships. Most of the studies have attempted to establish a positive relationship between human relations or employee-centered leadership styles and both job satisfaction and satisfaction with the supervisor. Likert and his colleagues at the Survey Research Center (1961) have provided the most abundant evidence in favor of such an interpretation. However, Vroom (1964) has stated that the evidence is not conclusive enough at this point to definitely affirm such a proposition.

Hypothesis VI. There will be more employee job satisfaction for those employees under democratic and idiocratic supervisors than for those under bureaucratic and autocratic supervisors.

Hypothesis VII. There will be more employee satisfaction with the supervisor for employees under democratic and idiocratic supervisors than for those under bureaucratic and autocratic supervisors.

Vroom (1964) feels that only those aspects of the supervisor's behavior that are perceived by the subordinates are related to job satisfaction. In his analysis of the amount

of time supervisors spent in various activities, Gross (1956) found that the employees' satisfaction with the amount of time spent in these activities was not related to actual observations of the supervisor's behavior, but was related to employees' perception of the supervisor's behavior.

These studies seem to indicate that employee satisfaction scores reflect employee perception of the supervisor's style and not necessarily responses to any set role. The manner in which the supervisor describes his leadership style may not affect employee satisfaction. What the supervisor does has an effect upon the employee's satisfaction. At this point it is not clear whether the effect upon employee satisfaction stems from what a supervisor does in his relationship with the employee or merely upon what the employee perceives the supervisor doing. In either case the more agreement that exists between the supervisor's and the employee's reports of the supervisor's role behavior, the more closely employee satisfaction should relate to both.

Several factors could also determine an employee's perception of the supervisor's behavior besides the behavior itself. The norms developed among employee work groups as to how supervisors act, could predispose the employee to perceive the supervisor's behavior in another way. Many people often have preconceived notions of supervisors before they enter a job or even take their first job. Both of these factors are common in affecting the employee's

perception of a supervisor's behavior. Generally these other conceptions of the supervisor's behavior interfere with the employee's correct perception of the supervisor's behavior.

The supervisor's role behavior is employed as cues for employee behavior. The employee who agrees with the supervisor on the perception of the supervisor's behavior perceives the correct cues. Operating on those cues the employee establishes the role relationship the supervisor intended and is rewarded accordingly. With the repeated occurrence of these behaviors and rewards the employee begins to internalize this pattern of role behavior. Internalization of the role behavior is a determinant of the employee satisfaction. In the case in which the employee agrees with the supervisor on the perception of the supervisor's role behavior, he will internalize role behavior for which he will be rewarded consistently. Those employees who do not agree with their supervisors on the supervisor's role behavior use a different set of cues for their role behavior. This role behavior will not be rewarded as much as the role behavior of the employees who agree because it will not always be consistent with the expectations of the supervisor. Therefore, the following hypotheses are proposed:

Hypothesis VIII. There is no relationship between the leadership style reported by the supervisor and the employee's job satisfaction.

Hypothesis IX. There is no relationship between the leadership style reported by the supervisor and the employee's satisfaction with his supervisor.

Hypothesis X. There is a relationship between the leadership style perceived by the employee and the employee's job satisfaction.

Hypothesis XI. There is a relationship between the leadership style perceived by the employee and the employee's satisfaction with his supervisor.

Hypothesis XII. The greater the degree of agreement between the supervisor's report of leadership style and the employee's perception of the supervisor's leadership style, the greater the employee's job satisfaction.

Hypothesis XIII. The greater the degree of agreement between the supervisor's report of leadership style and the employee's perception of the supervisor's leadership style, the greater the employee's satisfaction with his supervisor.

CHAPTER III

Research Site and Data Gathering

Companies

Under the auspices of the School of Labor and Industrial Relations at Michigan State University, a team of researchers led by Eugene Jacobson, Professor of Psychology; William Faunce, Professor of Sociology; and Einar Hardin, Professor of Economics, investigated the relationships between automation and attitudes toward change. Two medium sized insurance companies were surveyed to determine the relationships of supervisory practices, communication, employee personality, and employee work history to employee response to change. The change process analysed was the introduction of the companies first IBM 650 electronic data processing machine.

The first study involved a company employing about 500 persons, 300 of them housed in the central home office building. Questionnaires were administered to both supervisory and nonsupervisory personnel in February, 1957, approximately three months after the computer had been in use.

A second study, in another insurance company, with approximately 400 persons, investigated the same problems.

Here the questionnaire was administered to supervisory and nonsupervisory personnel in November, 1957.

Studies Using These Data

A general overall view of the results of this research can be found in two articles: (1) Jacobson, Trumbo, Cheek, and Nangle (1959); and (2) Faunce, Hardin, and Jacobson (1962). Jacobson, Trumbo, Cheek, and Nangle describe the study and report four facets of nonsupervisory employees' responses to change. Faunce, Hardin, and Jacobson (1962) summarize research findings on employee response to technological change.

The most detailed reports of the two insurance company studies are found in the doctoral dissertations of Don Trumbo (1958), John Nangle (1961), and Gloria Cheek Kamenske (1965). Trumbo reported on a number of factors related to attitudes toward change. He described a change scale index, and reported relationships between favorable attitudes toward change and other employee characteristics. Nangle investigated the effects of intra-organizational communications and the response to them on attitudes toward change. Gloria Cheek Kamenske's main concern was with the personality variables involved in attitudes toward change. Specifically she dealt with anxiety and dogmatism measures as they related to change factors.

Several other investigations of aspects of employee response to change were reported by one or more of the

research team members. Included in Appendix A is a bibliography of the research articles originating from this data.

Sample

This study will use only the data from the investigation of the second insurance company. Supervisors who have three or more employees reporting to them are included in the analysis. The study population consists of twenty-five supervisors and 154 employees. Work groups of employees reporting to one supervisor have from three to sixteen members.

Definition of Leadership Style

Index of Leadership Style

In the survey of the insurance companies the questionnaires for both supervisory and nonsupervisory personnel were identical except for the set of questions on supervisory style. This set of questions was matched with the supervisors reporting about their own way of handling different situations, and the employees reporting on how their supervisor handled the same type of situation. The four basic styles which Nelson describes are the bureaucratic, the autocratic, the idiocratic, and the democratic. According to Nelson the basic dimension underlying these leadership styles is the communication pattern which the supervisor develops with his subordinates. The bureaucratic leader attempts to avoid all communication

and contact with his subordinates. He is rule-centered and develops only official relationships, emphasizing loyalty to himself and the company.

The autocratic leader has one-way communication with his subordinates based upon his own technical knowledge and skills. His self-centeredness is expressed through his repetitious, detailed criticisms of the subordinates and his expectations for their blind obedience to his every directive.

A two-way communication exists between the idiocratic supervisor and his subordinates, but only in so far as it allows the supervisor to manipulate employee interest and motivation. This type of supervisor tries to develop ambition within the individual worker and competition among the workers through a diplomatic distribution of individual rewards and punishments.

The development of the group is the prime consideration of a democratic supervisor. He integrates his subordinates into a cooperative team through close, frequent, and sincere two-way communication.

Nelson's Leadership Inventory was converted into a multiple choice format to measure the supervisor's perceptions of their own supervisory style. The employees' perceptions of their supervisor's leadership style was measured by a scale which is complementary to the supervisor scale. Both were constructed by Trumbo (1958).

The original survey instrument contained twenty-five Nelson type leadership questions for the supervisors and

twenty questions for the employees. In order to make comparative statements about the supervisors' leadership style from the point of view of both the supervisor and the subordinate, only those items with identical stems for both groups were used in this analysis. This reduced the set of questions to ten. Each item was designed to produce information about characteristic ways of dealing with a different situation or problem in leadership practice. The situations included problems of getting out the production, supervisor development, type of employee to hire, method of reorganizing departmental work, maintenance of discipline, basis for ratings and promotion of an employee, handling of employee suggestions, training a new employee, means of disseminating orders and information, and selection of supervisors. For each of the ten questions the supervisor or employee was presented with four alternatives, each alternative representing one of Nelson's four styles (see Appendix B). Responses in each category were tallied and a distribution of the sums of the ten responses across the four alternatives was defined as the index of leadership style. For instance, supervisor number two listed no bureaucratic responses, two autocratic, and four idiocratic and democratic responses each. Supervisor number eleven gave three bureaucratic responses, two autocratic, two idiocratic, and three democratic responses.

Length of Time With The Company

This was a single item index. Each respondent was asked, "when were you hired by _____ (name of company)?" The year in which they were hired was used as the measure of the length of time that each person had been employed by the company.

Length of Time With The Supervisor

A single item was used to determine the length of time anyone worked under a particular supervisor. The specific question asked was "how long has this person been your supervisor?" In the question preceding this one the respondent was asked to name the person to whom they reported directly.

General Job Satisfaction

This was one of two measures of job satisfaction. General job satisfaction is a measure of a person's overall satisfaction with the job. The index is based on the answer to the question "Taking everything into account, how satisfied are you with your job?"

Specific Job Satisfaction

The second measure of job satisfaction was obtained through the summation of answers to questions about fourteen aspects of job satisfaction. Aspects of the job included in this index are listed in Table I.

TABLE I
Specific Job Satisfaction Index

Attitude Object	Specific Aspects
Job	1. Variety in the work. 2. Degree of interest of job. 3. Amount of work. 4. Accuracy demanded. 5. Control over work pace. 6. Skill needed. 7. Planning necessary. 8. Responsibility demanded. 9. Judgment needed. 10. Importance to the company.
Supervision	11. Amount of supervision.
Security	12. Security felt in the job.
Reward	13. Amount of pay.
	14. Chance for promotion.

Satisfaction With The Supervisor

Satisfaction with the supervisor is a two item index based on the questions "How do you feel about the relationship between you and your supervisor?" and "How do you feel about the way your supervisor handles his (her) job?" Responses to both questions are summed as an indicator of satisfaction with supervisor.

All of the satisfaction items used in this study were Likert style items with alternatives ranging from "completely satisfied" to "not satisfied." The entire set of items described in this chapter from the questionnaire used in the second insurance company study can be found in Appendix B.

CHAPTER IV

Comparison of Supervisors and Employees on Leadership Style Index

The Nelson Index of leadership style is a measure of four ways in which an industrial supervisor can interact with his subordinates. A brief summary of each of these styles is that the bureaucratic leader relies upon the rules and formal structure of the organization to lead his work group; the autocratic leader directs the situation on the basis of his own ability and technical knowledge; the idiocratic leader manipulates the workers through his own pleasant personality and knowledge of people; and the democratic leader attempts to develop the workers into a cohesive and participative unit. Characteristics of the Index itself and the response patterns of the supervisors and the employees are described in this chapter.

Two methods have been used for scoring this Index. Nelson (1949) administered his Index to a group of foremen in the form of paired comparisons. Each item could be scored from 0 to 3, since each was compared three times. There were twenty-one problem areas, giving a highest possible score of sixty-three. The range of scores obtained in the study from a possible 0 to 63 are shown in Table II.

TABLE II
Range of Scores (Nelson)
(N = 220)

Bureaucratic	9 - 38
Autocratic	18 - 50
Idiocratic	19 - 52
Democratic	18 - 52

Trumbo (1958) did not use the same format in his adaptation of the Nelson Index for use in a medium sized insurance company. Instead of paired comparisons, he presented the four styles as multiple choice alternatives in a set of twenty-five hypothetical leadership situations, and asked a group of supervisors to select preferred alternatives. Trumbo constructed a similar twenty item scale to measure employee perceptions of their own supervisor's style. On both scales Trumbo's scoring system assigned one point for each item. His theoretical range of scores was 0 to 25 for supervisors, and 0 to 20 for the employees. The range of scores for each style appears in Table III.

The Trumbo adaptation of the Nelson Index was used in 1958 in a study of a second insurance company conducted by Hardin, Trumbo, Nangle, and Cheek. It is reported in this monograph, but only those questions with identical stems for both supervisors and employees were tabulated for

TABLE III
Range of Scores (Trumbo)

	Supervisors (N = 46) (0-25)	Employees (N = 223) (0-20)
Bureaucratic	0-10	0-12
Autocratic	1-12	0-15
Idiocratic	3-16	0- 9
Democratic	2-15	0-14

this analysis. This author found a range of responses in the second insurance company that is similar to the range Trumbo found in his study (see Table IV).

TABLE IV
Range of Scores (Heinen)

	Supervisors (N = 25) (0-10)	Employee (N = 154) (0-10)
Bureaucratic	0-3	0-5
Autocratic	0-5	0-8
Idiocratic	1-7	0-6
Democratic	1-6	0-7

The distribution of responses, as evidenced by the mean number of responses per category (see Tables V and VI), across all three studies are basically the same for

the three supervisory groups and also for the two employee groups. There are two minor differences. First, Nelson's supervisors did not give as much weight proportionately to the idioccratic category as did Trumbo's and Heinen's group of supervisors. There are also some differences in the propcrtionate weighting of the categories by the employee groups.

TABLE V

Mean Supervisor's Response to Each Leadership Category

	Nelson (N = 220)	Trumbo (N = 46)	Heinen (N = 25)
B	23.72	4.04	1.16
A	34.28	4.78	1.96
I	33.49	7.65	3.56
D	34.54	8.52	3.12

TABLE VI

Mean Employee's Response to Each Leadership Category

	Trumbo (N = 223)	Heinen (N = 154)
B	4.70	2.07
A	5.68	2.55
I	2.92	2.15
D	6.39	3.01

In examining the difference between the mean response of the supervisors and employees (Table VII) both the Trumbo and Heinen studies show that the supervisors give a higher mean response for the idiocratic and democratic categories than do the employees; whereas, the employees give a higher mean response for the bureaucratic and autocratic categories than do the supervisors.

TABLE VII

Difference in Mean Responses of Supervisors
and Employees to Each Leadership Category

	Trumbo			Heinen		
	Sup N = 46	Emp N = 223	Dif	Sup N = 25	Emp N = 154	Dif
B	4.04	4.70	-.66	1.16	2.07	-.91
A	4.78	5.68	-.90	1.96	2.55	-.59
I	7.65	2.92	4.73	3.56	2.15	1.41
D	8.52	6.39	1.13	3.12	3.01	.11

The three studies indicate that a similar pattern of supervisory style, as perceived by the supervisor and by the employees, can be obtained using two forms of the Nelson Index in three different work settings.

Two other kinds of information are offered by Nelson and Trumbo about the characteristics of this index. Nelson computed test-retest coefficients on his data and found correlations of .83 for the bureaucratic category, .67 for the autocratic category, .61 for the idiocratic category

and .69 for the **democratic** category. Trumbo, on the other hand, correlated item scores with total scores. For the supervisors, he divided the sample at the median on the basis of scores on a particular scale, and compared proportions of upper and lower groups selecting scale alternatives to each item. Within the supervisor's index the items were consistent with each of the subscales with three exceptions. For the employee group, methods and tables developed by Flanagan (1939) and Kelley (1939) were employed to obtain an estimate of the item-total score correlation. This method uses respondents in the upper 27% and lower 27% of the total score **distribution** and compares the proportion of correct responses to each item. Again, three items failed to correlate positively with the total score. From these analyses Trumbo concludes that there is evidence that for most items, the alternatives are meaningfully related to the leadership patterns which they were designed to reflect.

As mentioned in the theoretical section of this monograph, leadership style is not static. It is assumed that the style of supervision a person employs can vary from situation to situation. When Trumbo adapted the Nelson Index to allow the respondent to choose from among four alternative responses to leadership situations, he constructed a set of items that were intended to illustrate a wide variety of situations. For instance, in the employee questionnaire, two of the items are:

1. If I suggested an improvement in the section, my supervisor would be most apt to
 1. Urge me to send it directly to the Operating Committee.
 2. Urge me to talk it over with the others for their comments.
 3. Ask to have time to go over it before he makes any comments.
 4. Go over it with me; point out that this is the way to get ahead.

On this item a choice of "1" response would be coded as indicating a preference for the bureaucratic style, a choice of "2" would indicate a preference for the democratic style, a choice of "3" would indicate a preference for the autocratic style, and a choice of "4" would indicate a preference for the idiocratic style.

2. My supervisor attempts to maintain discipline by
 1. Letting each employee be responsible for his own conduct once he knows the rules.
 2. Helping employees work out a common standard of action based on the rules.
 3. Taking direct personal action against serious violators of the rules.
 4. Treating all employees alike and according to the rules.

On this item a choice of "1" would be coded as indicating a preference for the idiocratic style, a choice of "2" would indicate a preference for the democratic style, a choice of "3" a preference for the autocratic style, and a choice of "4" a preference for the bureaucratic style.

Similarly, each of the items suggests to the respondent a different situational context in which the four styles of leadership might be used.

When the respondent is presented with ten items like these, one possibility is that the respondent will be consistent from item to item, in the sense that he will choose

that alternative that always refers to one style. A respondent, for instance, could consistently check the alternative coded "bureaucratic" on all ten items.

Table VIII indicates the extent to which the respondents were consistent from situation to situation, that is from item to item. A Kuder-Richardson correlation coefficient estimate of reliability was used to determine the internal consistency. The low correlation coefficients indicate that each item is measuring separate aspects of leadership style. The Kuder-Richardson estimate would approach 1.0 if an employee who selected a bureaucratic response on one item would consistently choose a bureaucratic response on the other items and if another employee who did not select a bureaucratic response on one item would not choose a bureaucratic response on the other. If, on the other hand, an employee who selected a bureaucratic response on one item would be equally likely to choose any of the four leadership style responses on the other items, the Kuder-Richardson coefficient value would approach a value of .00. The latter is what appears to be the case. Table VIII shows no strong tendency for supervisors or employees to be consistent in selecting one kind of alternative as they considered the ten hypothetical leadership situations.

However, both the supervisory group and the employee group are consistent in their response of leadership style to any single situation. The Kuder-Richardson correlation

coefficients of subject consistency (Table IX) reveal that each supervisor or employee has a strong tendency to respond in the same way to a particular situation as every other supervisor or every other employee. A common pattern of responding to each situation is established within these two groups.

TABLE VIII

Kuder-Richardson Correlation Coefficients of
the Consistency of the Ten Items

	B	A	I	D
Supervisor (N = 25)	-.05	.09	.19	.30
Employees (N = 154)	.09	.34	-.07	.39

TABLE IX

Kuder-Richardson Correlation Coefficients of the
Consistency of Subjects in Each Situation

	B	A	I	D
Supervisor (N = 25)	.77*	.87*	.58*	.83*
Employees (N = 154)	.89*	.96*	.95*	.91*

*p < .01

These three sets of data demonstrate the feasibility of using the pattern of responses to the Nelson Index to describe the supervisor's and employee's perceptions of leadership style. First, the similarity among the three

studies in the distribution of responses across the total index indicates the consistency of response that has been obtained at separate times in different populations and with different forms of the Nelson Index.

Secondly, the large test-retest coefficients that Nelson obtained and the large item to total score correlations that Trumbo obtained, when combined with the first set of data, give additional credence to the notion that the Nelson Index is internally consistent.

The third set of data suggest that it is theoretically sound to describe leadership style in terms of the total pattern of responses to the entire Nelson Index. The Kuder-Richardson correlation coefficients of Table VIII show that each person describes leadership style as a composite of several characteristic responses to different situations. The Kuder-Richardson correlation coefficients of Table IX show that most of the supervisors and most of the employees respond to any one situation in the same way.

These three analyses provide evidence about the consistency and complexity of the data derived from using the Nelson Index. All three forms of evidence suggest the usefulness of further analyses of leadership style based on the Nelson Index and in particular, analyses of agreement between the perceptions of the supervisor and the employees who report to him.

In terms of leadership style it has already been stated that the response pattern of the supervisors is different

from that of the employees. The supervisors seem to prefer the idiocratic and democratic categories over the autocratic and bureaucratic. The employees seem to prefer the autocratic and democratic categories, although it is in the autocratic and bureaucratic categories that they give a higher number of responses than do the supervisors. (See Tables V, VI, and VII.) The employee's mean number of responses in the democratic category is 3.01 and in the autocratic category it is 2.55, whereas, their mean number of responses in the idiocratic category is 2.15 and in the bureaucratic category it is 2.07. But their mean number of responses in the bureaucratic category is .91 higher than the supervisors' 1.16 mean bureaucratic response. The employees' mean autocratic response is .59 higher than the supervisors' mean autocratic response of 1.96.

When a supervisor's responses on the leadership style index are compared with the responses on the leadership style index of employees who report to him, a different pattern of consistency is revealed. By correlating the supervisor's number of responses in each of the categories of leadership style with the average number of responses in each of the categories for the supervisor's entire work group, a measure of the degree of correspondence is obtained (see Table X). For example, one supervisor's bureaucratic score is 0 and his work group's average bureaucratic score is 2. His autocratic score is 2 and his work group's average score is 4.71. The supervisor's idiocratic score and

and democratic score are both 4, while his work group's idiocratic score is 1.29 and the group's democratic score is 1.86. There is not a significant degree of correspondence or agreement between the supervisor and the employees in their description of the supervisor's leadership style. However, within the supervisory group and within the employee group, the responses are highly consistent. Certain normative within group patterns about supervisory role behavior appear to have developed in this organization. There also seems to be a difference in these normative patterns for supervisory personnel and non-supervisory personnel.

TABLE X

Correlation* Between the Supervisor and His Employee Work Group on Nelson Leadership Style Index.

	N = 25
Bureaucratic	-.22
Autocratic	.13
Idiocratic	.06
Democratic	.08

*Pearson Product Moment Correlation Coefficient

The preceding data suggested further analysis of both leadership style and the agreement of the supervisor and employee on their perceptions of leadership style. First, an attempt was made to classify the respondents on the basis of preferred styles of leadership. Most research to

date has classified supervisors on the basis of "pure" types of the basic styles described by Nelson. In this study, supervisors will be classified according to the distribution of their responses to the Nelson Index, resulting in "mixed" as well as "pure" types. Two separate classification schemes were devised, one based upon the supervisor's perception of his own leadership style and the other based upon the employee's perception of the supervisor's style.

Supervisor's responses were classified into five types. Two are "pure" types, idiocratic and democratic, each of which contains five or more responses in the identifying category and three or less in every other category. For example, supervisor 014 would be a democratic supervisor because he has five responses in the democratic category, two in the idiocratic, three in the autocratic, and zero in the bureaucratic. The two "mixed" styles, democratic-idiocratic and idiocratic-autocratic, contain a four/four distribution or a four/three distribution in the two major categories with two or less in the other two. The fifth style of supervision is a combination of all four, or a "thoroughly mixed" style in which the supervisor reports two and three responses in each category. The number of supervisors assigned to each category is:

<u>Style</u>	<u>Number of Supervisors</u>
Idiocratic (I)	7
Democratic-Idiocratic (D&I)	6
Democratic (D)	5

Bureaucratic-Autocratic- Idiocratic-Democratic (BAID)	4
Idiocratic-Autocratic (I&A)	3
	<hr/>
TOTAL	25

See Appendix E for a listing of the supervisors in each category and their response patterns.

Since there were more employees, the classification scheme for the employees was more elaborate, although the same basic operations were followed to assign employees to the types of leadership style. For the democratic, autocratic, and bureaucratic "pure" types, the identifying categories have four or more responses and at least two more than the other categories. Among the employees there existed no "pure" type of the idiocratic style. Six styles mix two or more categories: bureaucratic-autocratic, bureaucratic-idiotic, bureaucratic-democratic, autocratic-idiotic, autocratic-democratic, and idiocratic-democratic. Each of these styles contains at least three or four responses in the identifying categories and two or less in the other two. Two styles have responses equally distributed in three categories and none in the fourth. These are the bureaucratic-autocratic-democratic style and the bureaucratic-idiotic-democratic style. The remaining style is the combination of all four or thoroughly mixed style in which responses are distributed equally across all four categories. The number of employees in each style grouping is:

<u>Style</u>	<u>Number of Employees</u>
Democratic (D)	30
Autocratic (A)	21
Bureaucratic (B)	9
Bureaucratic & Autocratic (BA)	11
Bureaucratic & Idiocratic (BI)	7
Bureaucratic & Democratic (BD)	7
Autocratic & Idiocratic (AI)	4
Autocratic & Democratic (AD)	8
Idiocratic & Democratic (ID)	14
Bureaucratic Autocratic Democratic (BAD)	4
Bureaucratic Idiocratic Democratic (BID)	6
Bureaucratic Autocratic Idiocratic Democratic (BAID)	26
TOTAL	<u>147</u>

See Appendix F for a listing of the employees in each category and their response patterns.

A difference score was computed for each employee to measure his agreement with his supervisor. The score was obtained through the following formula:

$$Dif_e = \sqrt{\sum [Bs - Be]^2 [As - Ae]^2 [Is - Ie]^2 [Ds - De]^2}$$

Dif_e Difference score of employee.

$Bs - Be$ Difference between the number of responses the supervisor lists in the bureaucratic category and the number of responses the employee lists in the bureaucratic category.

$As - Ae$ Difference between the number of responses the supervisor lists in the autocratic category and the number of responses the employee lists in the autocratic category.

$Is - Ie$ Difference between the number of responses the supervisor lists in the idiocratic category and the number of responses the employee lists in the idiocratic category.

$Ds - De$ Difference between the number of responses the supervisor lists in the democratic category and the number of responses the employee lists in the democratic category.

This score for each employee was correlated with the length of time the employee had been with the company and the

length of time he had worked under his present supervisor. The correlation between the employee's difference score and his length of time with the company was .00, and the correlation between the employee's difference score and his length of time with the supervisor was .04.

Within the total group of supervisors and employees there is little agreement on perceptions of leadership style. This is related to the distinctly different patterns of responding to questions about leadership style that the supervisors and employees use. With the difference score, one can order employees on the amount of agreement that does exist between the employee and his own supervisor. Three different methods of indexing agreement have been used. First, employees were matched with their own supervisors and a degree of agreement was obtained for each actual work group (AWG). Then these groups were compared. Second, the supervisors were grouped on the basis of their reported leadership styles ($Sup_{per\ LS}$) and the employees under each group of supervisors were compared. Third, employees were grouped on the basis of their perceptions of leadership style ($Emp_{per\ LS}$) and the groups were compared. For all three indices of agreement a one-way analysis of variance was performed on the data.

Even though the total set of employees showed little agreement between supervisors and employees, the analysis of the difference scores in the actual work groups did show a range of agreement between supervisors and employees.

Table XI shows the mean and variances for each of the actual work groups and Table XII is the analysis of variance table. The significant F test indicates that there were some actual work groups with a high degree of agreement between the supervisor and employees and others with little agreement. By inspecting Table XI one observes that there is high agreement in work groups 31 and 63, but very little agreement in work group 5. This table also shows differences in variance among the groups as well as mean differences. Snedecor (1958) has devised a correction formula for a one-way analysis of variance test with unequal variances. In this case the Snedecor correction shows that the corrected F value would actually be much larger. We will therefore report the more conservative value.

TABLE XI

Means and Variances of Difference Scores of
Employees in Actual Work Groups

Group	N	Mean	Variance	Group	N	Mean	Variance
002	7	.51	.0027	026	3	.38	.0242
003	3	.31	.0304	027	12	.44	.0255
004	13	.45	.0169	031	3	.17	.0153
005	7	.70	.0066	032	12	.32	.0142
006	5	.42	.0287	051	3	.30	.0012
008	3	.56	.0068	052	15	.41	.0166
010	5	.44	.0098	053	10	.49	.0095
011	7	.35	.0128	056	4	.33	.0051
014	4	.33	.0210	059	5	.44	.0191
017	6	.58	.0188	061	3	.39	.0181
020	7	.46	.0214	063	6	.20	.0040
022	3	.54	.0168	064	3	.32	.0118
025	5	.39	.0101				

TABLE XII

One-way Analysis of Variance of Difference Scores
of Employees in Actual Work Groups

Source	SS	df	MS	F	p
Treatment (Work Groups)	1.79	24	.0744	4.20	< .001
Error	2.29	129	.0177		

Both the SupperLS and EmpperLS analysis of agreement indicates that the style of leadership perceived has a definite relationship to the degree of agreement between the supervisor and his subordinate. Table XIII shows the mean and variance difference scores in the groups of employees under the different leadership styles perceived by the supervisors.

TABLE XIII

Means and Variances of Difference Scores of Employees in
Groups Based Upon Supervisors' Perception of
Leadership Style

Style	N	Mean	Variance
D	20	.3475	.0298
I & A	22	.3609	.0170
BAID	26	.3907	.0252
I & D	33	.4287	.0215
I	51	.4776	.0248

A significant difference between the means (Table XIV) was obtained through the use of analysis of variance.

TABLE XIV

One-way Analysis of Variance of Difference Scores of Employees in Groups Based on Supervisors' Perception of Leadership Style

Source	SS	df	MS	F	p
Treatment SupperLS	.37	4	.0938	3.84	<.01
Error	3.59	147	.0244		

Under each basic leadership style group there are several supervisors and their respective work groups. In examining the difference between the means reported one must note that there were also significant differences among the different employee groups reporting to those supervisors who perceived themselves as a BAID type or an I type.

For the groups based upon the employee's perception of leadership style, large differences in the difference scores were obtained (see Tables XV and XVI). In examining Table XV, based on employee responses, one discovers three aspects of the data that account for the relationship between difference scores and style groups. Those styles that fall in the top third on agreement are the styles in which the employee perceives his supervisor to have some idiocratic characteristics. The styles in the middle third do not

contain any idiocratic characteristics, but do contain democratic properties. The bottom third of the styles contain neither democratic nor idiocratic features.

TABLE XV

Means and Variances of Difference Scores of Employees Perceiving Themselves Under Various Leadership Styles

Style	N	Mean	Variance
A & I	4	.21	.0003
BAID	26	.30	.0124
I & D	14	.33	.0140
B & I	7	.36	.0048
A & D	7	.39	.0284
BID	6	.41	.0052
D	30	.42	.0263
B & D	7	.45	.0139
BAD	4	.52	.0285
B & A	11	.53	.0085
A	22	.54	.0185
B	9	.58	.0130

TABLE XVI

One-way Analysis of Variance of Difference Scores of Employees in Groups Based on Employees' Perception of Leadership Style

Source	SS	df	MS	F	p
Treatment EmpperLS	1.44	11	.1306	7.38	<.001
Error	2.40	135	.0177		

The evidence in this chapter suggests that the supervisor's role behavior is perceived quite differently by supervisors and by subordinates. The three methods of analysing agreement indicate there are some groups which have very high agreement between supervisor and subordinate and others with very low agreement between supervisor and subordinate.

CHAPTER V

Relation of Satisfaction Measures to Leadership Style and to Agreement between Supervisor and Subordinate

The effect of supervisory role behavior on employee satisfaction has often been an interest of psychologists. It has been proposed here that the supervisor's role behavior serves as cues for the employee as to how he is to act. The use of these leadership styles or cues may have an effect on an employee's satisfaction with the job and especially satisfaction with his supervisor. However, it has previously been shown that the supervisor's role behavior is reported differently by supervisors and subordinates. An initial attempt to evaluate the influences of the supervisor's reported role behavior on employee satisfaction as opposed to the effects of the employee's perception of that role behavior on employee satisfaction will be examined in this chapter.

Three measures of satisfaction are being used in this study. Job satisfaction is measured in two ways. The first is a measure of the overall feeling of satisfaction that the individual has with his job. The second, is a composite index of responses to fourteen specific aspects of the job. Satisfaction with the supervisor is the third type of satisfaction measured. Each of these three types of satisfaction

will be analysed in terms of relationships with leadership style and the difference score. For all three measures of satisfaction and the difference score, a low score reflects a positive statement and a high score reflects a less positive statement. The relationships to be investigated are diagrammed in Figure 2. An explanation of each relationship appears below.

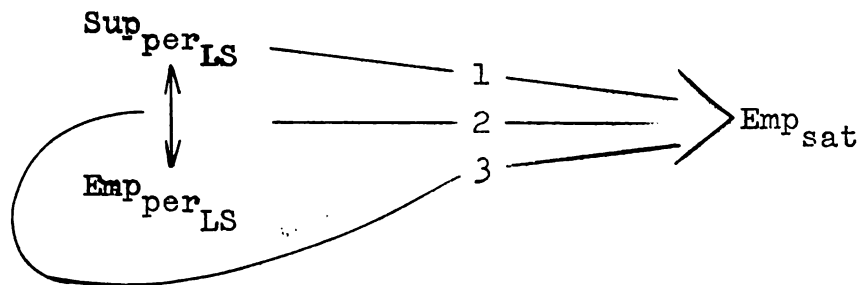


Fig. 2. Diagram of Relationship Between Leadership Style, Agreement, and Satisfaction.

The relationships are correlations between:

- (1) The supervisor's perception of his own leadership style, and the employee's job satisfaction, and satisfaction with his supervisor.
- (2) The employee's perception of his own supervisor's leadership style and the employee's job satisfaction and satisfaction with his supervisor. The relationship in (2) should be much stronger than the relationship in (1).
- (3) The degree of agreement between the supervisor and the employee on their perceptions of the supervisor's leadership style and employee's job satisfaction and satisfaction with his supervisor.

Although the arrows within the diagram indicate direction of the effects, this study will attempt to establish only the existence or non-existence of the relationship.

Employee Satisfaction as a Function
of Leadership Style as Perceived by
the Supervisor

The employee's general job satisfaction and his specific job satisfaction appear to be related to the leadership style perceived by the supervisor (see Tables XVII and XVIII).

TABLE XVII

Employee's General Job Satisfaction as a Function of the
Leadership Style as Perceived by the Supervisor

One-way Analysis of Variance					
Source	SS	df	MS	F	p
Treatment Supper _{LS}	14.37	4	3.59	2.79	<.05
Error	191.89	149	1.29		

TABLE XVIII

Employee's Specific Job Satisfaction as a Function of the
Leadership Style as Perceived by the Supervisor

One-way Analysis of Variance					
Source	SS	df	MS	F	p
Treatment Supper _{LS}	1136.22	4	248.06	2.48	<.05
Error	16809.98	147	114.35		

However, in examining Table XIX of means and variances for both measures of job satisfaction, one again discovers a lack of homogeneity of variance. Applying Snedecor's (1958) formula to these data, the F value depreciates slightly. It appears that employee job satisfaction is only somewhat related to the leadership style that the supervisor perceives.

TABLE XIX

Means and Variances of Job Satisfaction as a Function of the Leadership Style Perceived by the Supervisor*

General Job Satisfaction				Specific Job Satisfaction			
Group	N	Mean	Variance	Group	N	Mean	Variance
D	20	2.05	.75	I-A	22	32.91	171.81
I-A	22	2.14	1.03	D	20	33.40	126.04
I-D	33	2.33	1.43	I-D	33	37.91	98.03
I	53	2.57	1.34	BAID	25	38.12	81.63
BAID	26	3.00	1.38	I	52	40.00	100.65

*In this table and all subsequent tables of satisfaction scores, a low score represents high satisfaction and a high score represents low satisfaction.

The leadership style that a supervisor perceives does seem to be related to the extent to which an employee is satisfied with his supervisor (see Tables XX and XXI). In this case, the correction for the heterogeneity of variances does not change the interpretation of the relationship.

TABLE XX

Means and Variances of Employee Satisfaction with the Supervisor as a Function of the Leadership Style Perceived by the Supervisor

Group	N	Mean	Variance
I-A	22	3.59	4.51
D	20	4.10	5.09
I-D	33	4.51	4.92
I	53	5.45	6.78
BAID	26	5.61	4.62

TABLE XXI

Employee Satisfaction with the Supervisor as a Function of the Style of Supervision Perceived by the Supervisor

One-way Analysis of Variance					
Source	SS	df	MS	F	p
Treatment Supervisors	84.29	4	21.07	3.73	<.01
Error	842.65	149	5.65		

However, a note of caution must be extended to the reader in interpreting the differences between the means of the various groups. Within groups of supervisors who perceive their leadership style as either I or I-D, there are significant differences in employee satisfaction with the supervisor.

Both Tables XIX and XX indicate that employee satisfaction across all measures is highest when the supervisor perceives his leadership style to be idiocratic-autocratic or democratic. Employee satisfaction is lowest when the supervisor perceives his leadership style to be bureaucratic-autocratic-idiocratic-democratic or simply idiocratic. Idiocratic-democratic style is associated with intermediate levels of employee satisfaction.

Leadership Style Perceived by the Employee

When the employees are grouped on the basis of the leadership style that they perceive in their supervisor there are significant differences among the perceived leadership styles and employee's general job satisfaction (Table XXIII), the employee's specific job satisfaction (Table XXIV), and the employee's satisfaction with the supervisor (Table XXV). In Table XXII the mean, variance, and rank of the means is presented for all these measures of satisfaction. In order to compare the effects of the leadership style perceived by the employees on all three measures of employee satisfaction, a Spearman rank order correlation was computed among the three ranks of mean satisfaction. The Spearman correlation between general job satisfaction and specific job satisfaction is .93, the correlation between general job satisfaction and satisfaction with the supervisor is .91, and the correlation between specific job satisfaction and satisfaction with the

supervisor is .90. All three rank order correlations are significantly different from zero at the .01 level.

TABLE XXII

Means, Variances, and Ranks of Means of Employee Satisfaction for Groups based upon Leadership Style Perceived by the Employee

Group	N	General Job Satisfaction			Specific Job Satisfaction			Satisfaction with Supervisor		
		Rank of Mean	Mean	Var.	Rank of Mean	Mean	Var.	Rank of Mean	Mean	Var.
D	30	1	1.83	.87	3	34.07	95.33	1	3.40	4.04
I-D	14	5	2.36	1.09	4	34.36	108.23	2.5	3.50	3.39
BAD	4	3	2.00	.50	5	34.50	65.25	4	3.75	2.19
BID	6	3	2.00	.80	1	25.83	57.81	2.5	3.50	2.58
BAID	26	7	2.54	1.02	8	39.20	115.04	7	4.92	4.84
B-I	7	3	2.00	.86	2	28.71	133.07	5	4.28	2.77
A-I	4	6	2.50	2.25	6	35.50	32.75	8.5	5.00	1.50
B-D	7	8	2.71	.49	7	38.86	96.12	6	4.57	4.24
A-D	7	10	3.00	1.14	9	41.71	132.78	8.5	5.00	4.86
B-A	11	11	3.18	1.42	12	44.18	55.24	11	6.54	4.98
A	22	9	2.77	1.63	10	42.19	64.35	10	6.36	6.32
B	9	12	3.33	1.55	11	42.33	106.45	12	6.67	8.67

TABLE XXIII

Employee General Job Satisfaction as a Function of the Supervisor's Leadership Style Perceived by the Employee

One-way Analysis of Variance					
Source	SS	df	MS	F	p
Treatment EmpperLS	32.6671	11	2.9697	2.40	< .025
Error	165.7713	134	1.2370		

Table XXIV

Employee Specific Job Satisfaction as a Function of
the Supervisor's Leadership Style Perceived
by the Employee

One-way Analysis of Variance					
Source	SS	df	MS	F	p
Treatment EmpperLS	3273.7312	11	297.612	2.94	<.005
Error	13440.5033	133	101.056		

TABLE XXV

Employee's Satisfaction with Their Supervisor as a
Function of the Supervisor's Leadership Style
Perceived by the Employee

One-way Analysis of Variance					
Source	SS	df	MS	F	p
Treatment EmpperLS	218.70	11	19.88	3.95	<.001
Error	679.76	135	5.03		

The groups used in the analyses represented in Tables XXII to XXV do not exist together as actual groups in the organization. For these analyses, employees were pooled together on the basis of their individual perceptions.

Spearman rank order correlations were also computed for the twenty-five actual work groups for comparison with the correlations of the contrived groups. The Spearman correlation between general job satisfaction and specific job satisfaction for the actual work groups was .82; the correlation between general job satisfaction and satisfaction with the supervisor was .71; and the correlation between specific job satisfaction and satisfaction with the supervisor was .60. All three of these rank order correlations for the actual work groups are significant at the .01 level. However, the magnitude of the correlations for the actual work groups on each satisfaction measure is not as large as the magnitude of the correlations for the group based upon the employee's perception of their supervisor's leadership style.

The leadership styles perceived by the employees that rank the highest on the different measures of satisfaction are the democratic or the combination idiocratic-democratic. After these types, it appears that the more thoroughly mixed styles, such as the BID, BAD, and the BAID, follow. Those combinations of two styles involving half from either idiocratic or democratic styles and the other half from the bureaucratic or autocratic styles show slightly less relationship with employee satisfaction. Leadership styles perceived by the employees to be autocratic or bureaucratic or the combination of the two are most likely to be associated with lower employee satisfaction. (See Table XXVI.)

TABLE XXVI

Mean Ranks for Satisfaction of Employee Groups based on the
Leadership Style Perceived by the Employees

Group	General Job Satisfaction	Specific Job Satisfaction	Satisfaction with the Supervisor
D I & D	3.00	3.50	1.75
BAD BID BAID	4.33	4.66	4.50
B & I A & I B & D A & D	6.25	6.00	7.00
B A B & A	10.66	11.00	11.00

Leadership style does seem to have a significant role in the satisfaction of the employee. However, it appears that it is the leadership style that the employee perceives in his supervisor rather than the leadership style the supervisor perceives in himself that is related more strongly to employee's satisfaction. In terms of job satisfaction, the F values were just approaching the .05 level among the groups based upon the supervisor's perception of leadership style; while the F values surpassed the critical .05 level for those groups based upon the employees perception of leadership style. Since satisfaction with the supervisor was related to both the supervisor's perception of his own leadership style and the employee's perception of the supervisor's leadership style and eta squared was computed to compare the strength of the relationships. The eta squared for employee satisfaction with

the supervisor and the supervisor's perception of his leadership style is .09; the eta squared for employee satisfaction with the supervisor and the employee's perception of the supervisor's leadership style is .24.

Employee Satisfaction as a Function
of the Agreement Between Supervisor
and Employee on Leadership Style

In order to examine the relation of satisfaction to the difference between supervisor and employee perception, a mean difference score for each work group was computed. Then the mean scores were listed from lowest to highest and the groups divided into quartiles. A one-way analysis of variance for each of the satisfaction measures was computed between the quartiles of the work group difference scores. For both the general job satisfaction and the specific job satisfaction of the employee there is no significant difference between the quartiles (see Tables XXVII and XXVIII). However, for the employee's satisfaction with his supervisor, there was a significant difference between the quartiles (see Tables XXIX and XXX). The mean satisfaction score for each quartile increased as the quartiles increased in degree of agreement. There are some problems in the interpretation of these mean differences in satisfaction with the supervisor. Each quartile includes several actual work groups. Within the first quartile and within the third quartile, significant

TABLE XXVII

General Job Satisfaction of Employees as a Function of the
Quartiles of Work Group Difference Scores

One-way Analysis of Variance					
Source	SS	df	MS	F	p
Treatment (Work Groups)	6.52	3	2.17	1.63	< .20
Error	199.75	150	1.33		

TABLE XXVIII

Specific Job Satisfaction of Employees as a Function of
Quartiles of Work Group Difference Scores

One-way Analysis of Variance					
Source	SS	df	MS	F	p
Treatment (Work Groups)	901.42	3	300.47	2.61	< .10
Error	17044.78	148	115.18		

TABLE XXIX

Means and Variances of Satisfaction with the Supervisor for
Quartiles of Work Group Difference Scores

Quartiles	N	Mean	Variance
1st (High Agree)	30	3.90	4.69
2nd	26	4.19	5.25
3rd	55	5.01	6.39
4th (Low Agree)	43	5.65	5.48

TABLE XXX

Satisfaction with the Supervisor of Employees as a Function of Quartiles of the Work Group Difference Scores

One-way Analysis of Variance					
Source	SS	df	MS	F	p
Treatment (Work Groups)	67.45	3	22.49	3.92	<.025
Error	859.49	150	5.73		

differences exist among the actual work groups in the amount of satisfaction with the supervisor. Consequently, the quartiles in this analysis are not strictly comparable.

Each employee's difference score was also listed from lowest to highest, and the total group of employees was divided into quartiles on the basis of their difference score. Table XXXI shows a trend toward significant differences between the quartiles in the employee's general job satisfaction.

TABLE XXXI

General Job Satisfaction of Employees as a Function of the Difference Score of the Employees

One-way Analysis of Variance					
Source	SS	df	MS	F	p
Treatment Emp. Dif. Score	9.27	3	3.09	2.37	<.10
Error	195.07	150	1.30		

However, Tables XXXII and XXXIII do show significant differences between the quartiles in relation to the employee's specific job satisfaction and also his satisfaction with his supervisor.

TABLE XXXII

Specific Job Satisfaction of Employees as a Function of the Difference Score of the Employees

One-way Analysis of Variance					
Source	SS	df	MS	F	p
Treatment Emp. Dif. Score	1839.48	3	613.16	5.69	< .005
Error	15954.28	148	107.80		

TABLE XXXIII

Satisfaction with the Supervisor as a Function of the Difference Score of the Employees

One-way Analysis of Variance					
Source	SS	df	MS	F	p
Treatment Emp. Dif. Score	62.08	3	20.69	3.47	< .025
Error	892.86	150	5.95		

When the mean satisfaction scores for each of the quartiles is examined, an unexpected relationship is discovered. For all three measures of satisfaction the least

satisfaction occurs in the fourth or low agreement quartile, but the most satisfaction occurs in the third quartile (Table XXXIV). On all three measures of employee satisfaction, the pattern of the means is the same. There is a large difference between quartile three and quartile four in specific job satisfaction and satisfaction with the supervisor. Perhaps there exists within an organization a certain level of disagreement within the supervisor-employee relationship that can be tolerated without much consequence. However, if that level is exceeded it may have serious effect upon employee satisfaction.

TABLE XXXIV

Means of Satisfaction Scores for Each Quartile
of Employee Difference Scores

Quartiles	N	GJS	SJS	SS
1st (High Agreement)	39	2.43	35.16	4.46
2nd	41	2.46	38.46	4.83
3rd	35	2.11	33.32	4.14
4th (Low Agreement)	39	2.82	42.56	5.85

Employee Satisfaction as a Function
of Both Leadership Style and Degree
of Agreement

Since the leadership style the employee perceives and the degree of agreement between the employee and supervisor are both related to satisfaction, the two variables were combined in a three by two analysis of variance to see whether there are any interaction effects between the two.

For this analysis employees were placed in three groups. The first group contained employees who perceived a democratic style or the idiocratic-democratic combination; the second contained those who perceived a bureaucratic, or autocratic, or bureaucratic-autocratic combination; the third group contained any combination of two styles of which half was either democratic or idiocratic and the other half either bureaucratic or autocratic.

In terms of the degree of agreement, employee's difference scores were dichotomized at the median and those below the median were considered high agreeers and those above the median, low agreeers. The individual cell sizes are of some interest in themselves. Among those employees who perceived their supervisors to be democratic, there were twenty-four who had high agreement with their supervisor and twenty who had low agreement. Sixteen of the employees who perceived their supervisors to have a mixed style of supervision were high agreeers and ten were low agreeers. Among the employees who perceived some bureaucratic or autocratic style, there were only five who were high agreeers, while thirty-six were low in agreement.

A main effect of leadership style was found for the measure of general job satisfaction, but neither the main effect of agreement nor the interaction effect of leadership style and agreement were significant (see Table XXXV).

When the leadership style perceived by the subordinate is one of the democratic styles then his general job satisfaction is highest (mean 3.98; $N = 44$). The general job

satisfaction associated with the mixed leadership styles as perceived by the subordinate is somewhat lower (mean 5.04; $N = 26$); whereas the general job satisfaction associated with the bureaucratic and autocratic leadership styles perceived by the subordinate is lowest (mean 5.85; $N = 41$).

TABLE XXXV

3 x 2 Analysis of Variance of General Job Satisfaction

Source	SS	df	MS	F	p
Leadership Styles (A)	11.00	2	5.50	4.10	< .05
Agreement (B)	.00	1	.00	.00	
A x B	.625	2	.312	.23	
Within Cell	140.76	105	1.34		

Table XXXVI shows that neither the main effect of style, agreement nor the interaction effect reached significance for the measure of specific job satisfaction. There is, however, a significant main effect of leadership style for the employee's satisfaction with his supervisor, but not a significant main effect of agreement nor a significant interaction effect (see Table XXXVII).

The leadership styles perceived by the employee were strongly related to satisfaction with the supervisor. The democratic leadership style was associated with the most satisfaction with the supervisor (mean 6.78; $N = 44$).

followed by the mixed leadership styles (mean 9.34; N = 26) and then the bureaucratic and autocratic leadership style (mean 11.92; N = 41).

TABLE XXXVI

3 x 2 Analysis of Variance of Specific Job Satisfaction

Source	SS	df	MS	F	p
Leadership Style (A)	350.37	2	175.18	1.50	NS
Agreement (B)	42.25	1	42.25	.36	NS
A x B	21.16	2	10.58	.09	NS
Within Cell	12255.37	105	116.72		

TABLE XXXVII

3 x 2 Analysis of Variance of Satisfaction with Supervisor

Source	SS	df	MS	F	p
Leadership Style (A)	82.50	2	41.25	8.40	<.001
Agreement (B)	0.00	1	0.00		
A x B	21.12	2	10.56	2.15	<.20
Within Cell	515.65	105	4.91		

From the previous three analyses, it appears the leadership style perceived by the employee has a strong effect on employee satisfaction. However, the leadership style perceived appears to only have a global effect on their

satisfaction with their job and only a specific effect in relation to the satisfaction with their supervisor. Agreement with the supervisor on the perceptions of leadership style appear to have little effect on any aspects of employee satisfaction.

CHAPTER VI

Discussion of Results

The leadership process within an organization is a complex process involving many interrelationships. This thesis investigates aspects of the leadership process that have not been developed in previous research.

One of the theoretical bases of this study is the analysis of role relationships by Rommetveit (1954). However, the focus here has been upon role behavior of the supervisor rather than expectations for the subordinates' role behavior. This approach, in part, was dictated by the theoretical notion proposed by Jacobson (1967) that the supervisor attempts to communicate through his leadership style what the employee should expect in his relationship to the supervisor and how he is to behave. Leadership styles act as cues for employees to indicate how they should respond.

Several questions were proposed:

1. How is the leadership style of the supervisor perceived by the supervisor himself and by the employees reporting to him?
2. To what extent does a supervisor and an employee agree on the supervisor's leadership style?

3. Do the different leadership styles affect the employee's satisfaction differentially?
4. Is employee satisfaction related to:
 - (a) the supervisor's perception of his leadership style?
 - (b) the employee's perception of the supervisor's leadership style?
 - (c) the agreement between the supervisor's perception of his leadership style and the employee's perception of the supervisor's leadership style?

Most studies rely merely on the reports of the employees to discuss the supervisor-employee relationship. For the most part, reports from both supervisors and employees have not been used together. A few psychologists (Besco & Lawshe, 1959; Vroom, 1964; Gross, 1956) have pointed out the discrepancies between these reports. The evidence in this study supports the contention that the supervisor's report of the leadership process is different from the employee's report of the same process. Likert (1958) concluded from the discrepancy between the supervisor's and the employees' reports that the supervisor was describing his own behavior inaccurately and that employee reports should be accepted as more accurate evidence about supervisory behavior.

However, there is no reason to believe that the employees' reports are more accurate than the supervisor's.

Both perceive the behavior of the supervisors in terms of their own expectancies, attitudes, and personality characteristics. Their roles cause them to examine any supervisory behavior from a different aspect, but both the supervisor and the employees may be and probably are distorting to some degree the supervisor's behavior.

The data, in fact, are consistent in reference to this point. Even though the correspondence between the supervisors' perceptions and the employees' perceptions of leadership style is practically non-existent, the correspondence among supervisors about supervisory style and the correspondence among employees about supervisory style is high. To speak of either the supervisors or the employees reporting the actual behavior of the supervisors inaccurately is to neglect a very important aspect of the data. It appears that a different set of norms and expectations are being used by supervisors and by employees in reporting of leadership style. Employees are more likely than supervisors to report the supervisors to be bureaucratic and autocratic. Supervisors tend to report themselves as more idiocratic and democratic than the subordinates tend to report them. This type of discrepancy is common in any discussion with management and subordinates about leadership practices. Often management will stress its interest in the well-being of the employee and its constant efforts to treat him fairly and to work with him, while on the other hand subordinates paint the picture of the "money grubbing ogres"

who have no consideration for their subordinates. Both caricatures involve some deviations from reality, but are important in the behaviors of the two groups.

Further analysis of the data indicated that there were some differences among the supervisors and among the employees in their reports of leadership style. Even though the uniformity within these two groups in reporting about the supervisor's leadership style was very high, it was not perfect.

To sort out the various relationships within this complex pattern of roles and role expectations, data were examined from three perspectives.

- (1) Employees were grouped on the basis of the leadership style perceived by the supervisor.
- (2) Employees were grouped on the basis of the leadership style perceived by the employee.
- (3) The work groups of employees and their supervisors, as they existed within the company, were used for analysis.

Using procedures one and two allowed comparison between supervisory and non-supervisory perceptions. Using procedures two and three allowed comparisons between individual and group responses. These comparisons provide the framework for the examination of the hypotheses proposed in Chapter II.

Hypothesis I. There will be a lack of agreement between the supervisor's perception of his own leadership style and his employee's perception of the supervisor's leadership style.

The comparisons demonstrated that there was little correspondence between the supervisor's perception of leadership style and the employees' perception of the supervisor's leadership style. However, there were groups which did have high agreement between supervisor and subordinate on reports of the supervisor's leadership style. Actual work groups, employee groups based upon the supervisor's perception of his own leadership style, and employee groups based upon the employee's perception of the supervisor's leadership style were ordered with respect to the amount of agreement between the supervisor's and the employee's report of leadership style to allow testing of the following three hypotheses.

Hypothesis II. The longer a subordinate works with a company the greater will be the agreement between the supervisor's perceptions of his leadership style and the employee's perception of his supervisor's style.

Hypothesis III. The longer a subordinate works with a particular supervisor the greater will be the agreement between the supervisor's perception of his leadership style and the employee's perception of the supervisor's leadership style.

Hypothesis IV. The agreement between the supervisor's and employee's perception of the supervisor's style will be greater for those with the supervisor a long time than for those with the company a long time.

None of these three hypotheses were supported by the data. The correlation between the employee's length of time with the company and the agreement with his supervisor's perception of leadership style is .00, and the correlation between length of time with the supervisor and

agreement on leadership style is .04. Both relationships demonstrate that agreement between a supervisor and an employee is unrelated to amount of time together. In reporting the supervisor's leadership style, the employees seem to attend more closely to norms of the employee group about supervisory behavior than they do to the cues of their own supervisor.

One problem with using the measures of length of time with the company and with the supervisor to support this proposition does exist. Neither measure indicates how much or what kind of interaction actually took place between the supervisor and the employee, only that the two were together in the formal structure of the organization. It is possible that a person could be subordinate to a particular supervisor for a long time, but have very little interaction with him. Another person could serve under a supervisor for a short time and have almost constant interaction with the supervisor. Thus, the possibility that increased interaction between supervisor and employee will lead to greater agreement in their perceptions of the supervisor's style can not be ruled out by this data.

Another important aspect of the data was discovered in the examination of Hypothesis V. Neither supervisors nor employees describe themselves as perceiving the same style of supervision in different situations. In fact, most Supervisors described themselves and also most employees described their supervisor as using some combination of the

four Nelson Styles in their leadership practices. Too often supervisors are characterized as using only one of these four styles when actually they use a combination of the four. Hypothesis V addresses itself to the agreement on these more complex styles.

Hypothesis V. The more uniform is the supervisor's leadership style, the greater will be the agreement between his perceptions of his leadership style and the employee's perception of the supervisor's leadership style.

In examining the leadership styles as perceived by the supervisors, the hypothesis does not hold. There are differences in agreement on perceptions of style as a function of the leadership style that the supervisor perceives, but agreement is not higher for the consistent or "pure" styles than it is for the "mixed" styles. For both supervisor and employee perception of leadership style, there are some styles associated with high agreement between the perceptions of the supervisors and employees, and some associated with low agreement. It appears that agreement is a function of the style perceived rather than whether the style is the same in every situation.

The opposite of Hypothesis V is supported by the analysis of the leadership styles perceived by the employees. Only the democratic leadership style has a higher mean agreement score than any of the mixed styles. The other consistent or "pure" styles have a lower mean agreement score. However, the largest amount of agreement is not associated with the most thoroughly mixed scores either.

Again it appears that agreement between supervisors and employees on leadership style is a function of the particular leadership style perceived rather than the degree of uniformity within the style.

Employee satisfaction was measured in three different ways and from three different perspectives. The measures were employee general job satisfaction, employee specific job satisfaction, and employee satisfaction with the supervisor. Each satisfaction measure was evaluated in terms of the supervisor's perception of his leadership style, the employees' perception of the supervisor's leadership style, and the agreement between the supervisor and employee on their perceptions of the supervisor's leadership style. The remaining hypotheses are concerned with employee satisfaction.

Hypothesis VI. There will be more employee job satisfaction for employees under democratic and idiocratic supervisors than for those under bureaucratic and autocratic supervisors.

Hypothesis VII. There will be more employee satisfaction with the supervisor for employees under democratic and idiocratic supervisors than for those under bureaucratic and autocratic supervisors.

The hypotheses were not supported by the supervisor's perception of his own style. First, since no supervisor perceived himself to be an autocrat or a bureaucrat, the comparison could not be made. Second, when the supervisor perceived himself to be a democrat, the employees had high job satisfaction and high satisfaction with their supervisor; but when the supervisor perceived himself to be an

idocrat, the employee's job satisfaction and his satisfaction with the supervisor were low.

However, the hypotheses were strongly supported for all three measures of satisfaction based upon the leadership style of the supervisor that was perceived by the employee. The most employee satisfaction occurred when the employee perceived his supervisor to be either democratic or idiocratic-democratic. The least employee satisfaction, when the employee perceived his supervisor to be autocratic, or bureaucratic or the combination of both. In addition the thoroughly mixed (BID, BAD, BAID) are ranked closely behind the democratic or participative leadership styles in the amount of employee satisfaction. The other mixed styles (B-I, A-I, B-D, A-D) have almost the same amount of employee satisfaction associated with them as the more thoroughly mixed styles.

Likert (1961), McGregor (1960) and Argyris (1964) insist that participative principles of supervision lead to high satisfaction among employees. The results of this study offer some support for their contentions. On the other hand, the importance of considering "mixed" styles is demonstrated. The satisfaction scores for the "mixed" styles are very high and approach those of the democratic styles, and are considerably higher than the satisfaction scores for the autocratic and bureaucratic styles. In those cases in which the participative styles have been found less suitable, perhaps one of these "mixed" styles

would be more effective. However, this empirical question is in need of further research. Another interesting question is concerned with the differences among the "mixed" styles. At this point there is no basis for distinguishing among them in terms of satisfaction.

The next four hypotheses were concerned with whether employee satisfaction is related to the supervisor's perception of leadership style or the employee's perception of the supervisor's leadership style. Most of the previous evidence suggests that employee satisfaction is related to the employee's perception of leadership style.

Hypothesis VIII. There is no relationship between the leadership style reported by the supervisor and the employee's job satisfaction.

Hypothesis IX. There is no relationship between the leadership style reported by the supervisor and the employee's satisfaction with his supervisor.

There was some relationship between the leadership style reported by the supervisor and the employee's job satisfaction but it was not very strong. A stronger relationship was found between the leadership style reported by the supervisor and the employee's satisfaction with the supervisor.

The leadership style perceived by the supervisor that is most strongly related to employee satisfaction is the autocratic-idiocratic style. For many supervisors, human relations management means a complete abdication of management. For this type of supervisor, human relations management means "let the people do what they want."

Autocratic-idiocratic on the other hand represents a combination of directive management with a concern for people.

The other leadership styles perceived by the supervisors were associated with employee satisfaction in descending order of sincere concern for people. Democratic leadership style was followed by idiocratic-democratic, idiocratic, and a mixed bureaucratic-autocratic-idiocratic-democratic style.

Hypothesis X. There is a relationship between the leadership style perceived by the employee and the employee's job satisfaction.

Hypothesis XI. There is a relationship between the leadership style perceived by the employee and the employee's satisfaction with his supervisor.

Both of these hypotheses are strongly supported. Each measure of satisfaction (general and specific job satisfaction, and satisfaction with the supervisor) is related to the leadership style perceived by the employees.

In addition, it was found that the leadership styles were consistently related to satisfaction. For all three measures of satisfaction, certain styles were associated with high satisfaction and certain styles with low satisfaction. When the twelve styles were rank ordered for each of the three satisfaction measures, high rank order intercorrelations were found. The rank order correlation between the employee's general job satisfaction and his specific job satisfaction is .93; the rank order correlation between the employee's general job satisfaction and his satisfaction with his supervisor is .91; the rank order correlation

between the employee's specific job satisfaction and his satisfaction with the supervisor is .90.

These results corroborate previous research in that employee satisfaction is more closely related to the leadership styles perceived by the employees rather than the leadership styles perceived by the supervisors.

Since the groups composed on the basis of the employees' perception of leadership style do not actually exist, the same rank order correlations were computed for the actual work groups. The correlations based upon the actual work groups are high, but not as high as those based on the artificial groups. For the actual work groups, the rank order correlation is .82 between general job satisfaction and specific job satisfaction; .71 between general job satisfaction and satisfaction with the supervisor; and .60 between specific job satisfaction and satisfaction with the supervisor.

The leadership styles perceived by the employee may be grouped into three clusters on the basis of their relationship to the measures of employee satisfaction.

The first cluster includes the leadership style combinations of democratic; bureaucratic-idiocratic-democratic; bureaucratic-idiocratic; idiocratic-democratic; and bureaucratic-autocratic-democratic. This cluster includes human relations oriented supervisors and bureaucratic supervisors with human relations orientations. The perceived capacity to be concerned with the human element or to infuse the

bureaucratic system with a human element seems to be a strong factor in employee satisfaction. This cluster is consistently highest on all three measures of satisfaction.

The second cluster of leadership styles associated with employee satisfaction includes the autocratic-idiocratic; bureaucratic-democratic; bureaucratic-autocratic-idiocratic-democratic; and the autocratic-democratic styles. If it can be assumed that autocratic and bureaucratic styles represent a perceived concern with work factors, and idiocratic and democratic can be interpreted as a perceived concern with human values, the combinations included in this second cluster tend to represent more emphasis on work factors than the first cluster. In a certain sense, this cluster can be interpreted to represent a balance of work and human concerns. The second cluster is consistently at a medium level for all three measures of satisfaction.

The final cluster of leadership styles includes the autocratic; bureaucratic-autocratic; and bureaucratic styles. This cluster represents an absence of concern for people and is consistently associated with a low level of satisfaction.

From this clustering of the rankings of different leadership styles perceived by the subordinates, it appears that a concern for people in the supervisor is dominant in determining employee satisfaction. Although the bureaucratic leadership style by itself may not promote employee satisfaction, it is supportive if it is associated with a concern for people. This analysis is highly simplistic and

speculative, but it demonstrates a need for more complete understanding of the meaning and expression of these leadership style combinations.

The last two hypotheses deal with employee satisfaction and agreement with supervisors about leadership style.

Hypothesis XII. The greater the degree of agreement between the supervisor's report of his leadership style and the employee's perception of the supervisor's leadership style, the greater the employee's job satisfaction.

Hypothesis XIII. The greater the degree of agreement between the supervisor's report of his leadership style and the employee's perception of the supervisor's leadership style, the greater the employee's satisfaction with his supervisor.

These hypotheses were approached in two ways. First, the actual work groups were separated on the basis of their group agreement scores and these groups were examined for differences in satisfaction. Second, the employees were grouped on the basis of their individual agreement scores and then these artificial groups of employees were examined for differences in satisfaction scores.

When the actual work groups were compared on the basis of group agreement scores, they did not differ in job satisfaction. However, there was a relationship to satisfaction with supervisor. This finding parallels the result obtained when looking at satisfaction as a function of the style of supervision perceived by the supervisor. Only a weak relationship existed between the style of supervision perceived by the supervisor and employee job satisfaction, but there was a stronger relationship to satisfaction with supervisor.

In the analyses of individual agreement scores and satisfaction, employees were grouped into quartiles on the basis of their agreement scores. Employees in the first or high agreement quartile were expected to have the most satisfaction. Each succeeding quartile of employees was expected to have less satisfaction, with the fourth or low agreement quartile having the least satisfaction. However, this correspondence between satisfaction scores and quartiles of agreement was not found. The largest difference in satisfaction scores appeared between the third and fourth quartiles. The degree of satisfaction was approximately the same in the first three quartiles. One interpretation could be that there is an adverse effect on satisfaction only when disagreement becomes quite large. The data do not allow further clarification of this finding.

Several additional analyses were performed relating employee perception of leadership style with agreement and satisfaction to determine whether there were significant interactions.

For all three satisfaction measures, employees were divided into high or low agreement groups. Employees were also clustered into three leadership style groups that are similar to the three clusters described in previous paragraphs. However, the basis for the first cluster was changed. Those employees who had been included in the first cluster because they perceived their supervisors to be a combination of human oriented and bureaucratic were

eliminated from the analysis. The first cluster, then, includes only employees who perceive their supervisors to be human value oriented.

The first group are employees who perceive the democratic or idiocratic-democratic combination; the second group are employees who perceive the "mixed" styles; and the third group consists of the employees who perceive the bureaucratic style or autocratic style or a combination of the two.

Examination of relationships with all three satisfaction measures confirmed the finding that the employee's perception of the supervisor's leadership style is related to the employee's general job satisfaction and his satisfaction with his supervisor but not his specific job satisfaction. The perception of leadership style appears to affect the interpersonal relationship directly and the job in only a global way. Therefore, it seems only appropriate that the leadership styles which are associated with the most satisfaction stress interpersonal qualities. There were no demonstrated interaction effects. Employee perception is strongly related to employee satisfaction. Agreement with the supervisor on the perception of leadership style is neither a main effect nor an interaction effect in employee satisfaction.

Previous studies have established the facts that persons perceive others in terms of their own characteristics and the behavior and role of the other person, and that they

attribute characteristics to the other person and respond to him on the basis of their perceptions. Excellent reviews of these studies of person perception appear in Secord and Backman (1964) and Tagiuri (1969). Evidence in this study suggests that the employee's perception of his supervisor's leadership style is the best predictor of employee satisfaction. The hypothesis of Vroom (1964) that only those aspects of the supervisor's behavior that are perceived by the subordinates are related to job satisfaction seems to gain some support from this data. These hypotheses were tested on the basis of three kinds of ordering of employees: individual perceptions, supervisors' perceptions, and work group. The relationship between perception and satisfaction was strongest in the analysis based on individual perceptions. If the latter two groupings can be considered as representing certain structural characteristics, both employee job satisfaction and employee satisfaction with the supervisor can be considered more of a perceptual correlate rather than a structural correlate.

A note of caution must be introduced before accepting this statement. Several theorists have pointed out the pitfalls in such conclusions (Robinson, 1950; Davis, Spaeth, and Huson, 1961; Blau, 1960). Davis et al. (1961) state the problem as: "Given data on individuals within specified aggregates (groups, counties, nations) what inference can one make about the nature of an effect at different levels of aggregation." They refer to these effects as

compositional, whereas Blau (1960) speaks of structural effects. Robinson (1950), on the other hand, approaches this problem from the opposite direction, and refers to the fallacy of the ecological correlation. Both Davis et al. (1961) and Blau (1960) along with Meltzer (1963) and Tannenbaum and Bachman (1964) have attempted to devise statistical methods to independently analyse the individual effects and the aggregate effects. This type of analysis was beyond the scope of this study.

The relationships of the agreement data to both leadership style and the satisfaction scores raise some additional analysis questions. The measure of agreement is not mathematically independent from the perceptions of style. Agreement scores can be related either directly or indirectly to the frequency distributions of the supervisors' perceptions of leadership style and the employees' perception of leadership style. The computation of the score accounts for some of the agreement and prohibits a conceptualization of agreement on a purely psychological rather than a statistical basis. Hastorf, Bender, and Weintraub (1955) reported a similar problem in their attempts to construct an empathy score. Tagiuri (1958) stressed that the problems and pitfalls associated with agreement measures can be avoided if one concentrates on the conditions leading to agreement or disagreement, rather than on who agrees and who does not. Cronbach (1958) suggests a methodology that could be used in this thesis. His method involves a definition of the

perceiver's perceptual space and a separate analysis for each of a series of components of the perceptual relation. Since the judgments in this study involve four variables or styles rather than one variable for each person, this analysis was not done.

Cronbach's methods suggest another refinement. As originally stated, the sent role and the received role are based upon the expectations and norms connected with the leadership role. However, in this study only information concerning the perceptions of the leadership role behavior were available. Both types of information are important to the understanding of the leadership process. Role expectations are proscriptions concerning behavior, and norms are patterns of expectations. They serve as means for evaluating and determining a person's performance in a particular role. The perceptions of a person can then act as a check on the correspondence of the behaviors to those expectations. In all cases the expectations of the perceiver as well as the expectations of the sender will influence the person's perceptions. In future investigations a clear distinction should be made between the expectations and the perceptions of a person and there should be independent measures of both.

Several aspects of this data point to a new approach to future studies of leadership. The roles and expectations of both the supervisor and the employee must be examined together. Too much valuable information is lost and

misinterpreted by evaluating the relationship only in terms of one side of this interaction. Only such a parallel analysis can reveal the full complexity of this relationship.

In relation to leadership style, combinations of various styles seem to be more prevalent than "pure" styles. A closer examination of these combinations and the expectations on which they are based should lead to a more thorough understanding of the leadership process. The expectations and perceptions upon which a supervisor bases his choice of leadership style needs to be explicated. At the same time, the expectations and perceptions upon which the employee perceives and responds to the supervisor's leadership style need to be determined. Both sets of data integrated within the organizational structure will describe more adequately the effects of leadership style. A model for such an analysis will be presented in the next chapter.

CHAPTER VII

Role Theory of Leadership Style

The findings of this study point to the need for a more complex model of the role relationship of the supervisor and subordinate. This relationship exists within a social network of interpersonal relationships.

Katz and Kahn (1966) have defined organizations as open social systems consisting of the patterned activities of a number of individuals. At the social psychological base of these systems are the role behaviors of the members, the norms prescribing and sanctioning these behaviors and the values in which the norms are embedded. The patterned activities are complementary or interdependent with respect to some common outcome.

These interdependencies necessitate a systems approach analyzing components of the managerial system in the organizational performance. In order to follow such an approach one must first describe the interaction network that underlies the social system of the organization and provides the linkage for the components of the organizational system.

A theoretical and methodological base for systematically identifying work group interaction structure through the use of quasi-sociometric procedures has been developed

by Jacobson and Seashore (1951) and Weiss and Jacobson (1955). The following structural concepts and operations are derived from this procedure.

Work Group--is the set of individuals whose relationships are with each other and not with members of other work groups (except for contacts with liason persons or between groups).

Liason Person--is an individual who works with at least two individuals who are members of work groups other than his own.

Contact Between Groups--is a single working relationship between members of sets of individuals who would otherwise be classified as separate work groups.

The use of these concepts will allow an independent definition of the structural boundaries within which a person defines his role in the leadership process. No research to date has attempted to establish how these different structural configurations within an organization affect the leadership style employed by a supervisor and the employees' response to that leadership style. Both the degree of connectedness and the position of the supervisor within the network should have a strong bearing on the supervisor's leadership style. Several other interesting questions can be answered through this technique. The correspondence between the formal organizational chart and the obtained sociometric work group patterns can be determined. This comparison may reveal several implications for the performance of the organization. Secondly, the role of the supervisor includes fulfilling a linking pin function within an organization (Likert, 1961). Any supervisor who fulfills such a role will occupy a liason position in this structure.

The individual remains the primary unit in the organizational system. It is necessary to integrate his personal role behavior with the organizational system components. With the network of interpersonal relationships within the organization described, a model for the individual's definition of his own role in the network can be elaborated (see Fig. 1). Both the role of the supervisor and the employee are divided into cognitive and behavioral components. Four determinants of the supervisor's role behavior are considered. The first is the standards for his own role. These standards comprise the ideal model he has established for himself in the performance of his leadership role. The second component is the standards for the employee's role. Each supervisor has his own conception of what the ideal employee should be like. This definition is instrumental in orienting how a supervisor deals with his employees. Corresponding to this ideal conception of the employee is the supervisor's perception of what the employees who report to him actually are like. These perceptions are based in part upon the responses of his work group to his previous attempts at influence. A final component determining the supervisor's role behavior is his perception of what his employees think the ideal supervisor should be like. In every role relationship each individual responds to experienced expectations that others hold for his role behavior. These four components interact with other factors such as ability, experience, etc. to determine the supervisor's perception of his

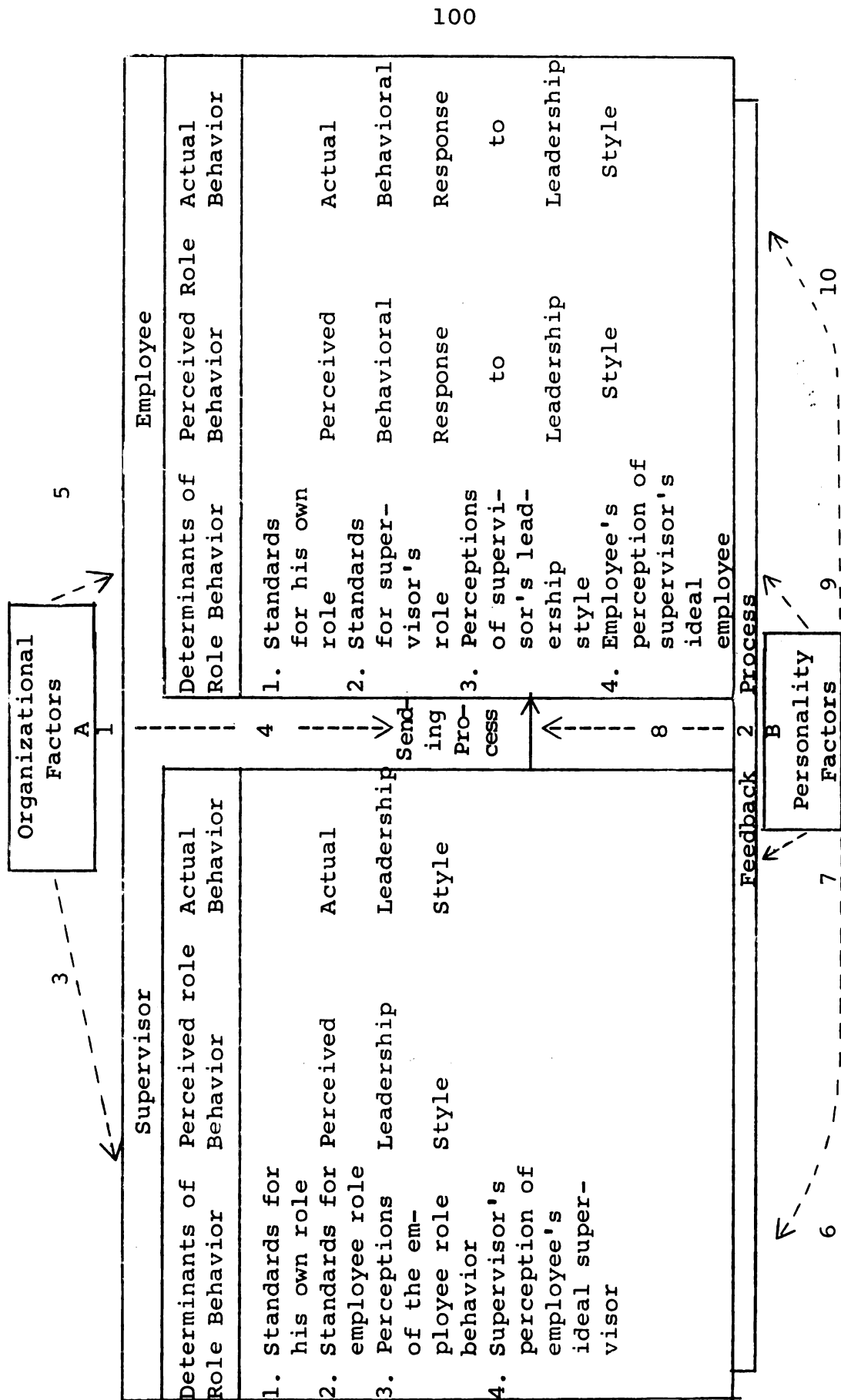


Fig. 3. A Theoretical Model of Some Factors Involved in Leadership Process.

own leadership style. All four factors in this relationship have to be weighted by a factor of importance in order to more accurately determine the leadership style of the supervisor. For any one supervisor a particular component may not influence his use of a particular leadership style. One common example of this sort of behavior is the archetype of the Theory X manager (McGregor, 1960). This type of supervisor starts with certain assumptions about the supervisory role and the employee role and ignores employee behaviors.

The role behavior of the supervisor can be considered from two perspectives. The first is his role behavior as he perceived it. The second is his role behavior as observed by some other person. Self-perceived role behavior and role behavior as observed by another person may or may not correspond. The degree of correspondence between the two depends in part upon the ability of the supervisor to report his own behavior accurately and the norms, values, and abilities of the person observing the supervisor's behaviors. The more nearly the norms and values of the observer correspond to those of the supervisor, the greater the degree of correspondence likely in their reports of the supervisor's behavior.

The employee's role behavior is determined by a similar set of components. The standards the employee has for his own role are one component determining his role behavior. These standards are the basis for his conceptualization of what his own role in the organization is. Another factor is his standards for the supervisor's role. These are expressions of how the employee thinks a supervisor should act.

Parallel to this component is the employee's perceptions of what the supervisor's leadership style actually is. These perceptions serve as the employee's representation of the supervisor's leadership style. The final component is the employee's perceptions of what his supervisor thinks the ideal employee should be like. This is the employee's perception of the supervisor's set of expectations for his employee role. These four factors combine with other factors to produce the employee's behavioral response to the supervisor's leadership style. Again each factor must be weighted by its importance to the employee.

The role behavior of the employee may also be considered from two perspectives. The first is the employee's role behavior as he himself perceives it and the second is his role behavior as observed by some other person. The degree of correspondence between the two is dependent in part upon the ability of the employee to report his own behavior accurately and the norms, values and abilities of the person observing the employee's behavior. The more the norms and values of the observer correspond to those of the employee, the greater the degree of correspondence likely in their reports of the employee's behavior.

Arrows 1 and 2 represent similar functions at different points in the role relationship. Arrow 1 represents the role sending process of the supervisory role. It is the behavior of the supervisor directed toward the employee. This arrow indicates an interaction of all three stages of the supervisory role with the three stages of

the employee role in the influence process. Arrow 2 is a feedback loop. It is the employee's response to the supervisor's sent role. This arrow also indicates an interaction of all three role aspects between both members of the role relationship.

Blocks A and B are enduring states of the organization and person which affect the leadership process. Each one can and does modify the process at different points in time.

Organizational factors have a major influence on the leadership process. Within each organization there exists a set of expectations regarding the roles of both supervisors and employees. The organizational structure, functional specialization, and division of labor are other potent factors. Arrows 3 and 5 represent similar effects upon the leadership process. Arrow 3 reminds us that organizational factors have an effect on the supervisor's determinants of his role behavior. Arrow 5 represents these same effects on the employee's determinants of his role behavior. The organizational effects on the role person's cognitions are both direct and indirect. For both the supervisor and the employee there exist a set of expectations held by the organization for their respective roles. Also their respective positions within the organizational structure can have explicit effect upon the manner in which they integrate their four determinants of role behavior and the importance they attach to them. Organizational norms and structure may or may not be considered in the person's definition of his role behavior.

Arrow 4 represents the effect of the organizational factors on the interaction between the supervisor and subordinate. Since the feedback process is the converse of this relationship, Arrow 4 refers to this interaction also. In both cases organizational norms and organizational structure dictate the manner and form of these interactions.

Personality factors are the person's enduring predispositions to respond in particular ways. Arrows 6 and 9 refer to ways in which personality affects a person's definition of his own role and his perception of others' roles. In both of these cases it is the person's perception of his own personality that is influencing his determinants of role behavior. The person may be inaccurate in his estimation of his personality, but it is this estimate which affects his ideals and perceptions of his own and others role behavior. Arrows 7 and 10, on the other hand, refer to the effects of personality on the individual's behavior. In all cases the person's perceived role behavior is molded or tempered by the personality of the individual. The more accurate a person is in estimating his personality in the determination of his role behavior the more likely his actual role behavior will correspond to his self-perceived role behavior. For example, a high authoritarian supervisor who insists he is a democratic supervisor will not appear to either an outside observer or his employees as a truly democratic supervisor. Arrow 8 represents the effect of the personality of the supervisor and that of the employee on the role sending and

feedback process. The interaction of the two different personalities affects the way messages and behaviors are transmitted by the supervisor and by the employees.

This model is an initial attempt to integrate supervisor-subordinate role relationship with the organizational system. Each aspect of the model requires the development of well defined measurement procedures and every component needs to be tested empirically.

BIBLIOGRAPHY

- Albrook, R. C. "Participative management: time for a second look," Fortune. May, 1967, pp. 166 ff.
- Argyris, C. Integrating the Individual and the Organization. New York: John Wiley, 1964.
- Bass, B. M. Organizational Psychology. Boston: Allyn and Bacon, 1965.
- Besco, R. O. and Lawshe, C. H. "Foreman leadership as perceived by supervisors and subordinates," Personnel Psychology. 1959, 12, 573-582.
- Blau, P. M. "Structural effects," American Sociological Review. 1960, 25, 178-93.
- Bowers, D. G. and Seashore, S. E. "Predicting organizational effectiveness with a four-factor theory of leadership," Administrative Science Quarterly. 1966, 11, 238-263.
- Cartwright, D. and Zander, A. Group Dynamics. New York: Harper and Row, 1953.
- Cronbach, L. J. "Proposals leading to analytic treatment of social perception scores," in Tagiuri, R. and Petrullo, L. (Eds.), Person Perception and Interpersonal Behavior. Stanford, California: Stanford University Press, 1958, 353-379.
- Davis, J. A., Spaeth, J. L., and Huson, Carolyn. "A technique for analysing the effects of group composition," American Sociological Review, 1961, 26, 215-25.
- Eddy, W. Dimensions of Organization Behavior. Unpublished doctoral dissertation, Michigan State University, 1962.
- Faunce, W. A., Hardin, E., and Jacobson, E. H. "Automation and the employee," The Annals of the American Academy of Political and Social Science. 1962, 340, March, 60-68.

- Fiedler, F. E. A Theory of Leadership Effectiveness. New York: McGraw-Hill, 1967.
- Flanagan, J. C. "General considerations in the selection of test items and a short method of estimating the product-moment coefficient from the data at the tails of the distribution," Journal of Educational Psychology. 1939, 30, 674-80.
- Fleishman, E. A. "Leadership climate, human relations, training, and supervisory behavior," Personnel Psychology. 1953, 6, 205-222.
- Gibb, C. A. "Leadership," in Lindzey, G. (Ed.), Handbook of Social Psychology. Cambridge, Mass.: Addison-Wesley, 1954, Vol. 2, 877-920.
- Gibb, C. A. "Leadership," in Lindzey, G. and Aronson, E. (Eds.), Handbook of Social Psychology. Reading, Mass.: Addison-Wesley, 1969, Vol. 4, 205-282.
- Gross, C. R. An observational analysis of supervisory behavior. Unpublished master's thesis, Michigan State University, 1956.
- Halpin, A. W. and Winer, B. J. The Leadership Behavior of the Airplane Commander. Columbus: Ohio State University Research Foundation, 1952.
- Hastorf, A. H., Bender, I. E., and Weintraub, D. J. "The influence of response patterns on the 'refined empathy score'," Journal of Abnormal Social Psychology. 1955, 51, 341-343.
- Hemphill, J. K. "Development of the leader behavior description questionnaire," in Bowers, D. G. and Seashore, S. E. Administrative Science Quarterly. 1966, 11, 238-263.
- Jacobson, E. "Effective executive leadership styles: a critique," in Wickert, F. R. and McFarland, D. E. (Eds.) Measuring Executive Effectiveness. New York: Appleton-Century-Crofts, 1967.
- Jacobson, E. and Seashore, S. E. "Communication practices in complex organizations," Journal of Social Issues. 1951, 7 (3), 28-40.
- Jacobson, E., Trumbo, D., Cheek, Gloria, Nangle, J. "Employee attitudes toward technological change in a medium sized insurance company," Journal of Applied Psychology. December, 1959, 43 (6).

- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., and Rosenthal, R. A. Organizational Stress. New York: John Wiley and Sons, 1964.
- Kamenske, Gloria Cheek. Some personality factors in attitude toward technological change in a medium sized insurance company. Unpublished doctoral dissertation, Michigan State University, 1965.
- Katz, D. and Kahn, R. L. The Social Psychology of Organizations. New York: John Wiley and Sons, 1966.
- Katz, D., Macoby, N., and Morse, Nancy. Productivity, Supervision, and Morale in an Office Situation. Ann Arbor, Michigan: Institute for Social Research, 1950.
- Katz, D., Macoby, N., Gurin, G., and Floor, L. Productivity, Supervision, and Morale among Railroad Workers. Ann Arbor, Michigan: Institute for Social Research, 1951.
- Kelley, T. L. "The selection of upper and lower groups for the validation of test items," Journal of Educational Psychology. 1939, 30, 17-24.
- Lewin, K., Lippitt, R., and White, R. "Patterns of aggressive behavior in experimentally created 'social climates'," Journal of Social Psychology. 1939, 10, 271-299.
- Likert, R. "Effective supervision: an adaptive and relative process," Personnel Psychology. 1958, 11, 317-352.
- Likert, R. New Patterns of Management. New York: McGraw-Hill, 1961.
- Likert, R. Human Organization. New York: McGraw-Hill, 1967.
- Linton, R. The Study of Man. New York: Appleton-Century, 1936.
- McGregor, D. The Human Side of Enterprise. New York: McGraw-Hill, 1960.
- Meltzer, L. "Comparing relationships of individuals and average variables to individual response," American Sociological Review. 1963, 28, 117-123.
- Nangle, J. E. The effectiveness of communications in preparation for change in an insurance company. Unpublished doctoral dissertation, Michigan State University, 1961.
- Nelson, C. W. Development and evaluation of a leadership attitude scale for foremen. Unpublished doctoral dissertation, University of Chicago, 1949.

- Newcomb, T. M. Social Psychology. New York: Dryden Press, 1950.
- Parsons, T. The Social System. New York: Free Press, 1951.
- Robinson, W. S. "Ecological correlations and the behavior of individuals," American Sociological Review. 1950 (June), 15, 351-357.
- Rommetveit, R. Social Norms and Roles. Minneapolis, Minn.: University of Minnesota Press, 1954.
- Secord, P. F. and Backman, C. W. Social Psychology. New York: McGraw-Hill, 1964.
- Snedecor, G. W. Statistical Methods. Ames, Iowa: Iowa State College Press, 1956.
- Stogdill, R. M. "Personal factors associated with leadership," Journal of Psychology. 1948, 25, 37-71.
- Stogdill, R. M. Managers, Employees, Organizations. Columbus: Bureau of Business Research Monograph, 125, 1965.
- Tagiuri, R. "Social Preference and its perception," in Tagiuri, R. and Petrullo, L. (Eds.), Person Perception and Interpersonal Behavior. Stanford, California: Stanford University Press, 1958, 316-336.
- Tagiuri, R. "Person perception," in Lindzey, G. and Aronson, E. (Eds.) Handbook of Social Psychology. Reading, Mass.: Addison-Wesley, 1969, Vol. 3 395-449.
- Tannenbaum, A. S. and Bachman, J. G. "Structural versus individual effects," American Journal of Sociology. 1964 (May), 69, (6).
- Trumbo, D. E. An analysis of attitudes toward change among the employees of an insurance company. Unpublished doctoral dissertation, Michigan State University, 1958.
- Vroom, V. Some Personality Determinants of the Effects of Participation. Englewood Cliffs, New Jersey: Prentice Hall, 1960.
- Vroom, V. Work and Motivation. New York: John Wiley and Sons, 1964.
- Weiss, R. S. and Jacobson E. "A method for the analysis of the structure of complex organizations," American Sociological Review. 1955, 20, 661-668.

APPENDICES

APPENDIX A

BIBLIOGRAPHY

(associated with Insurance Company Data)

- Faunce, W. A. Social stratification and attitude toward change in job content, Social Forces. 1961, 39 (2), December.
- Faunce, W. A., Hardin, E., & Jacobson, E. H. Automation and the employee, The Annals of the American Academy of Political and Social Science. 1962, 340, March, 60-68.
- Hardin, E. Computer automation, work environment, and employee satisfaction, Industrial and Labor Relations Review. July, 1960, 13 (4).
- Hardin, E. The reactions of employees to office automation, Monthly Labor Review. September, 1960, 83 (9).
- Hardin, E. Job satisfaction and the desire for change, Journal of Applied Psychology. 1965, 51 (1), 20-27.
- Jacobson, E., Trumbo, D., Cheek, Gloria, & Nangle, J. Employee attitudes toward technological change in a medium sized insurance company, Journal of Applied Psychology. December, 1959, 43 (6).
- Kamenske, Gloria Cheek. Some personality factors in attitude toward technological change in a medium sized insurance company. Unpublished doctoral dissertation, Michigan State University, 1965.

- Nangle, J. E. The effectiveness of communications in preparation for change in an insurance company. Unpublished doctoral dissertation, Michigan State University, 1961.
- Trumbo, D. E. An analysis of attitudes toward change among the employees of an insurance company. Unpublished doctoral dissertation, Michigan State University, 1958.
- Trumbo, D. E. Individual and group correlates of attitudes toward work-related change, Journal of Applied Psychology. 1961, 45 (5), 338-344.

APPENDIX B

(Questions used in the insurance company study that are analyzed in this thesis, from questionnaire prepared by Trumbo, Cheek, angle, and Jacobson.)

(The first ten questions appeared only on the supervisors' questionnaires.)

The purpose of the following questions is to get your idea about the practical value of different supervisory practices for this organization. We are not asking you which method would be ideal nor which method is now actually being followed in your department. Instead, we are asking you to tell us which method you consider the most effective supervisory method in this organization.

Directions: Check the one answer which you feel would be the most effective supervisory method for each situation. Sometimes you may not see much difference between two or more choices or may not like any of them. Always make a choice even if you are forced to guess.

1. The best way to get steady and dependable production is
 - a. praising employees when they deserve it, and appealing to their desires for self improvement.
 - b. careful direction and disciplining of employees.
 - c. to establish a pay schedule based on a job evaluation.
 - d. through the employees' desire to be part of a satisfying work team.
2. The average supervisor needs development most in
 - a. the proper use of official channels and forms for making reports, filing complaints, handling transfers, requisitioning, etc.
 - b. how to understand the employees' ideas, problems, and standards.
 - c. the basic technical knowledge he'll need in the department he's supervising.
 - d. the ways to deal with individuals efficiently without causing friction.

3. When hiring a new employee, the supervisor should select a man who is
 - a. intelligent and has a good deal of drive.
 - b. a hard worker and who doesn't need much supervision.
 - c. open-minded and willing to share responsibilities.
 - d. agreeable and willing to follow the regulations.
4. When a major reorganization of the employees' work is necessary in his department, the supervisor should
 - a. ask the personnel department to reassign the employees impartially.
 - b. call the employees together and get their suggestions about the reorganization.
 - c. use this opportunity to shift employees to jobs where each of them will feel happiest and thus work best.
 - d. use his own judgment and assign each employee to the kind of work the supervisor knows he does best.
5. To maintain departmental discipline, the supervisor should
 - a. help the employees work out a common standard of action based on the rules.
 - b. treat all employees alike and according to the established rules.
 - c. see to it that each employee learns company rules and can therefore be responsible for his own conduct.
 - d. take direct personal action on anyone who commits a serious violation of company rules.
6. The rating or promotion of an employee should be based primarily on
 - a. the ambition and ability to learn that he has shown.
 - b. his technical knowledge and ability, and his departmental experience.
 - c. objective records showing the amount of experience he's had, his length of employment, and his job skills.
 - d. the recommendations of a supervisor-employee merit-rating committee.

7. An employee's suggestion for an improvement in the department should be
 - a. passed up through the supervisor, whose knowledge of the technical needs of the department may enable him to improve the suggestion.
 - b. encouraged by the supervisor, so that the employees' initiative is developed and supported.
 - c. passed around among others in the department for their comments and suggestions before it's sent up.
 - d. sent directly to the Operating Committee.
8. A supervisor should train a new employee by
 - a. showing him repeatedly how to do the job, until the supervisor sees that he's developed efficient work habits in it.
 - b. making the job interesting to him by praising him when he does it well and correcting him tactfully when he shows his weak points.
 - c. giving him a completed written set of instructions to study, so that he can learn the right methods from the start.
 - d. explaining what the job requires, then allowing him to develop his own methods from the supervisor's suggestions and his own experience and knowledge.
9. The supervisor can give out new orders and information most effectively by
 - a. discussing them with the employees and getting their questions and comments.
 - b. sending written notices to every employee concerned.
 - c. explaining the orders or information to each employee concerned.
 - d. telling each employee about them informally at the appropriate time and place.
10. When a man is recommended for promotion to supervisor, the most important thing to consider is his
 - a. ability to use practical psychology in getting things done.
 - b. technical ability, initiative, creativity, and experience in the department.
 - c. understanding of, and respect for, official policies and programs.
 - d. standing among the employees as a leader.

(The next thirteen questions appeared only on the employees' questionnaires.)

11. What is your supervisor's name?
12. How long has this person been your supervisor?
 _____ years? _____ months?

13. When were you hired by _____ Years? _____
Months? _____.

Some supervisors are more likely to handle certain situations in one way than in another way. Check the one answer which best describes the way your supervisor would handle each of the following situations. Notice: "Supervisor" refers to the person to whom you report directly.

14. My supervisor would prefer to hire a person who is
- a. intelligent and has a good deal of drive.
 - b. a hard worker, who doesn't need much supervision.
 - c. open-minded and willing to share responsibilities.
 - d. agreeable and willing to follow the regulations.
15. Ratings and promotions in this department seem to be based on
- a. a person's records which show his job skills, length of employment, etc.
 - b. a person's technical knowledge and experience in the department.
 - c. a person's ambition and ability to learn.
 - d. recommendations by both supervisors and employees.
16. My supervisor is most apt to give out new orders and information by
- a. discussing them with the group, getting the group's comments and questions.
 - b. sending a written notice to every employee concerned.
 - c. explaining the orders or information to each employee concerned.
 - d. telling each employee about them informally at the appropriate time and place.
17. My supervisor seems most interested in developing his ability to
- a. properly make reports, handle paperwork, etc.
 - b. handle any problems of work flow, machine operation, etc.
 - c. understand employees' ideas, interests, and standards.
 - d. deal with individuals efficiently without causing friction.

18. My supervisor's idea of training seems to be
 - a. to repeat instructions until he's satisfied that the person is really efficient.
 - b. to develop the person's interest in the job by praising his progress.
 - c. to make sure the person has a complete set of instructions and job requirements.
 - d. to explain what the job requires then let the person develop his own methods.
19. If a major reorganization of the work in this department were necessary, my supervisor would probably.
 - a. notify us that the personnel department would reassign us as fairly as possible.
 - b. try to persuade certain employees to take the new assignments.
 - c. ask the work group for suggestions on how the reassignments should be made.
 - d. tell the employees they were being reassigned in the best way to get the work out.
20. My supervisor tries to get the work out by
 - a. carefully directing and disciplining employees.
 - b. appealing to the individual's desire for self-improvement.
 - c. following plans for scheduling work in detail.
 - d. trying to get employees to work together as a team.
21. If I suggested an improvement in the section, my supervisor would be most apt to:
 - a. urge me to send it directly to the Operating Committee.
 - b. urge me to talk it over with the others for their comments.
 - c. ask to have time to go over it before he (she) makes any comments.
 - d. go over it with me; point out that this is the way to get ahead.
22. My supervisor attempts to maintain discipline by
 - a. letting each employee be responsible for his own conduct once he knows the rules.
 - b. helping employees work out a common standard of action based on the rules.
 - c. taking direct personal action against serious violators of the rules.
 - d. treating all employees alike and according to the rules.

23. Supervisors seem to be chosen around here on the basis of
- a. how well they are liked by fellow employees.
 - b. their ability to influence people to get things done.
 - c. how well they know official policy.
 - d. how well they know the technical aspect of the work.
24. How do you feel about the relationship between you and your supervisor?
- a. completely satisfied.
 - b. very satisfied.
 - c. quite satisfied.
 - d. somewhat satisfied.
 - e. not satisfied.
25. How do you feel about the way your supervisor handles his job?
- a. completely satisfied.
 - b. very satisfied.
 - c. quite satisfied.
 - d. somewhat satisfied.
 - e. not satisfied.

(The rest of the questions appeared on both supervisors' and employees' questionnaires.)

26. Taking everything into account, how satisfied are you with your job?
- a. completely satisfied.
 - b. very satisfied.
 - c. quite satisfied.
 - d. somewhat satisfied.
 - e. not satisfied.

The following check list gives you an opportunity to express how you feel about certain aspects of your job. Consider the first aspect listed in the column to the left. Place a check mark under the statement in Column A which best describes how satisfied you are with this aspect of your job. Completely satisfied = CS, Very satisfied = VS, Quite satisfied = QS, Somewhat satisfied = SS, Not satisfied = NS.

Job Aspect	Column A				
	CS	VS	QS	SS	NS
27. The amount of variety in my work.	—	—	—	—	—
28. The amount of work required on my job.	—	—	—	—	—

	CS	VS	QS	SS	NS
29. The degree of accuracy demanded by my job.	—	—	—	—	—
30. My control over the pace of my work.	—	—	—	—	—
31. The importance of my job for the company.	—	—	—	—	—
32. The amount of supervision I get on my job.	—	—	—	—	—
33. The amount of skill needed on my job.	—	—	—	—	—
34. The amount of responsibility demanded by my job.	—	—	—	—	—
35. The amount of planning I have to do on my job.	—	—	—	—	—
36. The amount of judgment I have to use on my job.	—	—	—	—	—
37. The degree to which my work is interesting.	—	—	—	—	—
38. The amount of security I feel on my job.	—	—	—	—	—
39. My chances for promotion to a better job.	—	—	—	—	—
40. The amount of pay I get on my job.	—	—	—	—	—

APPENDIX C

Frequency of Responses to 10 Item Leadership Style Index

Supervisor's Work No.	Supervisor				Employees				Employee Average			
	B	A	I	D	B	A	I	D	B	A	I	D
002	0	2	4	4	14	33	9	13	2.00	4.71	1.29	1.86
003	1	2	2	5	7	10	5	8	2.33	3.33	1.66	2.66
004	1	3	5	1	36	40	23	30	2.78	3.08	1.77	2.31
005	1	0	7	2	24	20	10	14	3.42	2.86	1.43	2.00
006	0	2	4	4	12	11	10	12	2.40	2.20	2.00	2.40
008	1	3	5	1	5	5	6	14	1.67	1.67	2.00	4.67
010	1	1	6	2	10	9	13	17	2.00	1.80	2.60	3.40
011	3	2	2	3	7	9	21	30	1.00	1.29	3.00	4.29
014	0	3	2	5	7	6	9	17	1.75	1.50	2.25	4.25
017	0	0	6	4	16	9	11	19	2.66	1.50	1.83	3.16
020	3	0	1	6	11	17	16	22	1.57	2.43	2.28	3.14
022	1	3	2	4	8	16	3	1	2.66	5.33	1.00	.33
025	1	5	3	1	8	14	11	16	1.60	2.80	2.20	3.20
026	0	2	4	4	4	9	7	10	1.33	3.00	2.33	3.33
027	2	1	4	3	23	41	18	37	1.92	3.42	1.50	3.08
031	0	2	2	6	3	3	6	17	1.00	1.00	2.00	5.66
032	1	3	4	2	18	23	32	47	1.50	1.92	2.67	3.92
051	1	1	4	4	8	4	9	9	2.66	1.33	3.00	3.00
052	2	2	5	1	27	34	42	45	1.80	2.27	2.80	3.00
053	1	1	3	2	26	31	18	24	2.60	3.10	1.80	2.40
056	1	2	5	2	10	7	11	10	2.50	1.75	2.75	2.50
059	2	3	4	1	6	9	12	22	1.20	1.80	2.40	4.40
061	1	1	4	4	10	7	6	7	3.23	2.33	2.00	2.33
063	3	3	2	2	12	20	13	14	2.00	3.33	2.17	2.33
064	2	2	1	5	6	6	5	12	2.00	2.00	1.67	4.00

APPENDIX D

Individual Scores on Each Index

Emp. No.	Leadership Style				Difference Score	Satisfaction Scores		
	B	A	I	D		GJS	SJS	SS
002	0	2	4	4		5	59	
076	2	5	0	3	.55	2	34	5
106	2	5	1	2	.51	1	30	7
111	1	5	1	2	.49	3	43	8
117	3	3	1	3	.45	3	30	6
178	2	5	1	2	.51	3	38	6
186	1	5	3	1	.45	4	45	9
188	3	5	2	0	.61	1	43	7
003	1	2	2	5		2	41	
120	1	3	2	4	.14	3	49	6
144	2	3	2	3	.24	3	43	6
169	4	4	1	1	.55	2	43	6
004	1	3	5	1		2	24	
082	3	1	4	2	.32	3	41	6
092	2	4	3	1	.24	1	40	5
104	3	2	1	4	.55	3	51	7
121	4	5	0	1	.62	3	52	8
139	3	4	0	2	.57	3	53	8
151	3	3	3	1	.28	3	35	3
164	4	4	1	1	.51	3	50	6
166	2	5	0	3	.58	2	43	10
191	5	2	1	2	.58	4	53	9
201	2	3	1	4	.51	3	44	4
202	3	3	3	1	.28	2	42	7
222	2	3	2	3	.37	4	56	10
223	0	1	4	5	.47	3	42	6
005	1	0	7	2		1	14	
088	4	3	0	1	.85	1	38	5
110	5	2	2	1	.68	5	57	10
137	2	4	2	2	.65	5	50	6
205	1	4	2	3	.65	3	44	6
212	4	2	2	2	.62	3	43	8
217	3	3	0	4	.81	2	48	4
220	5	2	2	1	.68	3	39	8

Emp. No.	Leadership Style				Difference Score	Satisfaction Scores		
	B	A	I	D		GJS	SJS	SS
006	0	2	4	4		1	19	
080	4	2	1	1	.62	3	46	2
154	1	2	3	4	.14	2	31	3
167	2	3	3	1	.40	3	47	7
174	3	0	3	4	.37	1	20	4
219	2	4	0	2	.57	3	47	6
008	1	3	5	1		2	29	
083	0	1	3	6	.58	1	41	2
113	4	2	2	2	.45	1	21	2
214	1	2	1	6	.65	1	55	3
010	1	1	6	2		4	40	
075	2	2	3	2	.35	2	38	5
136	0	2	3	5	.45	1	35	2
147	4	2	1	3	.60	1	30	2
162	2	3	2	3	.47	2	29	2
172	2	0	4	4	.32	3	43	8
011	3	2	2	3		1	28	
085	1	2	3	3	.24	4	30	4
096	2	0	2	4	.32	4	43	10
098	1	0	4	5	.40	4	50	4
107	1	3	1	5	.32	3	48	6
168	2	3	3	2	.20	4	52	8
199	0	0	3	7	.55	3	32	3
208	0	1	5	4	.45	3	35	4
014	0	3	2	5		2	39	
094	4	1	2	3	.49	3	20	2
109	0	1	2	6	.24	1	24	2
142	3	2	3	2	.45	1	24	2
195	0	2	2	6	.14	1	38	2
017	0	0	6	4		3	50	
105	2	2	1	5	.58	2	38	4
135	2	1	4	2	.37	3	50	8
175	4	2	1	1	.76	5	45	5
179	1	1	2	6	.47	2	40	3
183	4	3	1	2	.73	5	37	10
203	3	0	2	3	.55	3	33	6
020	3	0	1	6		3	28	
084	3	2	0	4	.32	3	46	3
086	2	1	3	3	.40	3	51	4
091	2	3	2	2	.53	1	20	5
093	0	5	2	2	.72	3	45	9
100	1	2	4	3	.51	2	29	2
133	0	3	3	4	.51	1	13	3
176	3	1	2	4	.24	3	40	7

Emp. No.	Leadership Style				Difference Score	Satisfaction Scores		
	B	A	I	D		GJS	SJS	SS
022	1	3	2	4		2	32	
069	1	4	2	1	.37	2	39	2
114	2	8	0	0	.68	4	49	10
115	5	4	1	0	.58	4	38	7
025	1	5	3	1		3	33	
079	0	3	2	5	.47	2	31	4
116	3	2	3	1	.37	3	51	7
125	3	2	2	3	.42	4	60	6
131	2	4	2	2	.20	3	20	2
207	0	3	2	5	.47	1	41	2
026	0	2	4	4		4	46	
112	1	6	3	0	.58	5	54	8
141	1	1	3	5	.20	3	43	5
196	2	2	1	5	.37	1	30	4
027	2	1	4	3		2	35	
081	1	7	1	1	.71	1	49	2
108	2	3	3	1	.37	2	39	6
119	4	2	3	1	.32	1	20	2
132	3	3	0	4	.47	1	27	3
145	1	4	0	5	.55	3	45	2
148	1	6	0	3	.65	1	31	4
158	2	1	1	6	.42	2	41	2
160	3	3	2	2	.32	4	52	6
177	3	3	1	3	.37	2	33	2
210	0	1	3	5	.32	1	29	7
215	2	6	2	0	.62	4	47	7
218	1	2	4	3	.14	2	29	2
031	0	2	2	6		3	27	
173	0	2	2	6	.00	2	25	2
181	2	1	1	6	.24	2	31	3
185	1	0	3	5	.28	3	45	8
032	1	3	4	2		1	28	
090	1	1	4	4	.28	3	39	2
122	0	4	2	4	.32	1	14	2
124	2	2	1	5	.45	2	35	2
143	0	2	2	6	.47	2	28	2
157	1	2	4	3	.14	1	15	2
180	3	0	4	3	.37	2	14	2
193	2	2	3	3	.20	2	31	2
194	2	3	3	2	.14	3	29	5
197	2	3	2	3	.24	1	28	2
200	3	0	3	4	.42	1	23	2
206	1	1	2	6	.49	1	18	2
211	1	3	2	4	.28	3	46	8

Emp. No.	Leadership Style				Difference Scores	Satisfaction Scores		
	B	A	I	D		GJS	SJS	SS
051	1	1	4	4		3	44	
249	2	2	1	5	.35	1	28	2
258	3	1	4	2	.28	1	17	4
295	3	1	4	2	.28	3	46	2
052	2	2	5	1		3	36	
235	0	2	4	4	.37	1	18	2
236	4	4	1	1	.49	4	47	8
238	4	4	2	0	.42	3	38	6
242	1	0	6	3	.32	1	19	5
246	1	3	4	2	.20	2	28	7
248	0	4	3	3	.40	3	53	5
251	0	5	2	3	.51	1	--	2
256	2	2	1	5	.57	4	42	3
282	1	3	4	2	.20	2	32	4
284	1	2	3	4	.37	3	39	2
288	4	1	2	2	.40	4	46	10
292	2	0	2	5	.55	1	15	2
293	0	0	3	7	.69	1	18	2
297	4	3	2	1	.37	2	44	8
298	3	1	3	3	.32	3	29	5
053	1	1	3	2		2	29	
226	3	2	4	1	.40	3	38	6
247	2	2	0	5	.49	2	31	5
257	4	2	3	1	.45	2	22	6
260	2	5	0	3	.60	3	36	8
269	1	7	1	1	.71	4	48	8
274	1	2	3	4	.37	1	26	5
277	4	2	3	1	.45	1	17	4
278	4	2	1	3	.49	3	40	6
294	3	4	1	2	.51	1	30	3
299	2	3	2	3	.40	3	39	2
056	1	2	5	2		3	38	
230	1	2	3	2	.28	3	44	7
250	2	2	3	3	.24	2	41	2
275	3	3	2	2	.37	2	35	4
283	4	0	3	3	.42	3	36	2
059	2	3	4	1		1	25	
229	3	2	1	3	.40	3	46	8
231	0	1	2	7	.69	3	48	4
245	1	1	3	5	.47	1	31	2
254	0	2	4	4	.37	4	52	5
286	2	3	2	3	.28	1	24	6
061	1	1	4	4		2	37	
228	4	3	2	1	.51	5	54	2
261	4	2	1	3	.45	3	45	5
280	2	2	3	3	.20	2	38	2

Emp. No.	Leadership Style				Difference Score	Satisfaction Scores		
	B	A	I	D		GJS	SJS	SS
063	3	3	2	2		1	44	
227	2	4	3	1	.20	5	42	4
241	3	3	2	1	.14	3	31	5
262	1	3	2	4	.28	5	50	7
279	2	3	2	3	.14	1	41	5
285	3	2	2	3	.14	2	--	6
296	1	5	2	2	.28	4	46	8
064	2	2	1	5		1	31	
225	1	2	0	7	.24	1	18	2
265	1	2	3	4	.24	1	33	2
270	4	2	2	1	.47	2	31	6

APPENDIX E

Classification of Supervisors into Leadership Styles

(Refer to Appendix D for Response Patterns)

<u>Leadership Style</u>	<u>Supervisor Number</u>	<u>No. in Work Group</u>
Idiocratic	004	13
	005	7
	008	3
	010	5
	017	6
	052	15
	056	4
Democratic & Idiocratic	002	7
	006	5
	026	3
	027	12
	051	3
	061	3
Democratic	003	3
	014	4
	020	7
	031	3
	064	3
Blend	011	7
	022	3
	053	10
	063	6
Idiocratic & Autocratic	025	5
	032	12
	059	5

APPENDIX F

Classification of Employees According to Their Perception of Supervisor's Leadership Styles

<u>Leadership Style</u>	<u>Employee Number</u>	<u>Report to Supervisor No.</u>
Democratic	083	8
	214	8
	136	10
	107	11
	109	14
	195	14
	105	17
	179	17
	079	25
	207	25
	141	26
	196	26
	158	27
	210	27
	173	31
	181	31
	185	31
	124	32
	143	32
	206	32
	249	51
	256	52
	292	52
	293	52
	247	53
	231	59
	245	59
	096	11
	199	11
	225	64
Autocratic	076	2
	106	2
	111	2
	178	2
	186	2
	188	2
	166	4

<u>Leadership Style</u>	<u>Employee Number</u>	<u>Report to Supervisor No.</u>
	093	20
	114	22
	112	26
	081	27
	148	27
	215	27
	251	52
	260	53
	269	53
	296	63
	137	5
	219	6
	069	22
	131	25
	108	27
Blend	144	3
	222	4
	075	10
	162	10
	168	11
	142	14
	091	20
	125	25
	160	27
	193	32
	194	32
	197	32
	299	53
	250	56
	275	56
	286	59
	280	61
	279	63
	285	63
	241	63
	167	6
	085	11
	086	20
	116	25
	230	56
	229	59
Bureaucratic	110	5
	191	4
	220	5
	212	5
	080	6
	113	8
	175	17
	288	52
	270	64

<u>Leadership Style</u>	<u>Employee Number</u>	<u>Report to Supervisor No.</u>
Bureaucratic & Autocratic	169	3
	121	4
	164	4
	115	22
	236	52
	238	52
	297	52
	228	61
	183	17
	294	53
	139	4
Bureaucratic & Idiocratic	119	27
	257	53
	277	53
	226	53
	082	4
	258	51
	295	51
Bureaucratic & Democratic	094	14
	278	53
	261	61
	147	10
	176	20
	104	4
	084	20
Autocratic & Idiocratic	092	4
	227	63
	246	52
	282	52
Autocratic & Democratic	145	27
	122	32
	205	5
	201	4
	120	3
	211	32
	262	63
Idiocratic & Democratic	223	4
	172	10
	098	11
	208	11
	090	32
	235	52
	254	59
	218	27
	100	20
	157	32
	154	6

<u>Leadership Style</u>	<u>Employee Number</u>	<u>Report to Supervisor No.</u>
	284	52
	274	53
	265	64
Bureaucratic,	117	2
Autocratic &	177	27
Democratic	217	5
	132	27
Bureaucratic,	298	52
Idiocratic &	174	6
Democratic	200	32
	283	56
	180	32
	203	17

MICHIGAN STATE UNIV. LIBRARIES



31293104427624