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A STUDY OF RELATIONSHIPS BETWEEN MANAGERIAL STYLE AND EFFECTIVENESS AND SELECTED SUBORDINATE CHARACTERISTICS

A Dissertation

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Degree

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daughters, Lucinda Roberts Baird and Elizabeth Roberts Heaton, each in a special way made this project possible.

ABSTRACT

The purpose of this study was to determine whether a significant relationship existed between managerial style and effectiveness and certain subordinate characteristics.

The specific objectives were:

1. To determine whether there was a statistically significant relationship between management style and effectiveness and job involvement of subordinates.

2. To determine whether there was a statistically significant relationship between managerial style and effectiveness and age category of subordinates.

3. To determine whether there was a statistically significant relationship between managerial style and effectiveness and length of service of subordinates.

4. To determine whether there was a statistically significant relationship between managerial style and effectiveness and educational background of subordinates.

Two populations were selected for the study. The managerial populations consisted of Deans and/or Directors of Admissions and Records in colleges and universities in Tennessee and the subordinate population was made up of the nonprofessional staff members of these managers.

Two instruments were used to gather data for the study. The Management Style Diagnosis Test developed by William J. Reddin (1970)

was completed by the managerial group, and the Job Involvement Scale developed by Lodahl and Kejner (1965) was completed by the subordinate groups. Additional data relating to age, length of service and educational background were also collected from the subordinate groups.

The chi-square technique was applied to job involvement data to determine whether there were significant differences in job involvement scores of subordinates of more effective managers and those of less effective managers, as well as among the eight management styles. The t-test was used to determine whether there were significant differences in the means of scores of subordinates of more effective managers and those of less effective managers, and the analysis of variance was performed to test for differences in means of job involvement scores among all eight management styles.

Chi-square was utilized to determine whether there were significant differences in age category, length of service, and educational background of subordinates of these managers. With the exception of educational background, for which there were no significant differences between subordinates, the findings were significant at the .05 level.

The major findings of the study were:

1. There were significant differences in the job involvement of subordinates of more effective managers and job involvement of subordinates of less effective managers. Among the eight styles, subordinates of the Executive, Bureaucrat, Developer and Missionary style managers exhibited greater job involvement.

2. There were significant differences in age category of subordinates of more effective managers and those of less effective managers with more effective managers tending to have subordinates who were younger.
3. There were significant differences between length of service in the current job of subordinates of more effective managers and those of less effective managers. Subordinates of more effective managers tended to have shorter lengths of service than those of less effective managers.

It can be inferred, then, from the data gathered in the study that characteristics of subordinates do mediate managerial behavior. Subordinates who bring attitudes of high job involvement, who are younger, and who have shorter periods of service in the job facilitate more effective management.

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CHAPTER I

INTRODUCTION TO THE STUDY

I. INTRODUCTION

Over the past fifty years, much progress has been made in the development of a body of knowledge relating to leadership and managerial style. Research has indicated that leadership, one of the manager's most critical functions, does not derive from innate personal qualities; but is a function of the appropriate use in situational contexts of the elements identified as "initiating structure" and "consideration." The identification of these elements was an outcome of a particularly productive period of research at Ohio State University spanning the years 1946-1956 (Korman, 1966). The specific situation with which the manager must deal determines what the appropriate blend of these elements may be (Tannenbaum and Schmidt, 1958). Reddin (1970) added the effectiveness dimension to the study of leadership in his 3-D Theory of Managerial Effectiveness. Effectiveness refers to the degree to which the manager achieves the output requirements of the position. This theory incorporates the concepts of task orientation and relationship orientation.

Recently an alternative approach to research in this area has evolved. Rather than focusing exclusively upon leadership behavior, attention now is also directed toward subordinate behavior. There are growing indications that the interdependencies which develop between

the manager and the subordinate mediate managerial behavior. A behavioral exchange relationship develops between manager and subordinate which characterizes the attributes the subordinate brings to the work situation and the managerial style response to those attributes (Runyon, 1973). Job involvement is an important personality variable which influences subordinate work behavior. Job involvement was defined as the internalization of values about the goodness of work or the importance of work in the worth of the person (Lodahl and Kejner, 1965). Other attributes which were assumed to affect subordinate behavior and thus become influencing factors in the managerial-subordinate interaction were age category, length of time in the specific job, and educational level. Emphasis on subordinate characteristics was a relatively new thrust in investigations of organizational behavior.

The Problem

A review of the pertinent literature revealed considerable evidence of the reciprocal influence of managerial style and subordinate behavior. While subordinate job involvement attitudes, age category, length of time in the position, and educational background have all been identified as important factors affecting performance in the work environment, there was a sparsity of research directed toward exploration of the relationships between managerial styles and effectiveness and these integrals. The problem of the study was, therefore, the lack of evidence indicating the significance of these specific subordinate characteristics as they relate to managerial style and effectiveness.

Purpose of the Study

The purpose of the study was to collect data and apply statistical tests to these data to determine the existence of a statistically significant relationship between managerial style and effectiveness and certain subordinate characteristics. More specifically, the objectives were:

1. To determine whether there is a statistically significant relationship between management style and effectiveness and job involvement of subordinates.

2. To determine whether there is a statistically significant relationship between managerial style and effectiveness and age category of subordinates.

3. To determine whether there is a statistically significant relationship between managerial style and effectiveness and length of service of subordinates.

4. To determine whether there is a statistically significant relationship between managerial style and effectiveness and educational background of subordinates.

Justification of the Study

A review of related literature indicated that few efforts have been made to study data from persons in lower level or nonprofessional positions. The need for this was cited by Lodahl and Kejner (1965). Additionally, Dansereau, Graen and Haga (1975) found that the exchange relationship which develops between manager and subordinate during role making activities is predictive of subsequent behavior on the part of

both manager and subordinate. The ego involvement subordinates bring to the work situation was believed to be an active integral in the exchange relationships. Research was needed which focuses not only on leadership behavior toward subordinates, but probes the reciprocal influence of management-subordinate relationships as well. Greene (1975) found indications that subordinate performance causes both leader consideration and structure, and that a leader may positively affect performance by increased emphasis on both consideration and structure. While there was evidence of reciprocal causation between leader behavior and subordinate behavior, research designed to explore the relationship between management style and effectiveness and specific attributes of subordinates was needed (Rabinowitz, Hall and Goodale, 1977).

II. DESIGN OF THE STUDY

The design of the study involved collection of data in order to test four hypotheses to determine whether there is a statistically significant relationship between managerial style and the subordinate characteristics of job involvement, age category, length of service in the current job, and educational background.

The Hypotheses

The following research hypotheses were developed and stated in the null form:

1. Ho: The management style of the manager is independent of the job involvement scores of subordinates.

2. Ho: The management style of the manager is independent of the age of subordinates.
3. Ho: The management style of the manager is independent of the length of service in the current job of subordinates.
4. Ho: The management style of the manager is independent of the educational background of subordinates.

The Instruments Used

The instruments used to collect data for the study were the Reddin Management Style Diagnosis Test, third edition, and the Lodahl-Kejner Job Involvement Scale. Additional items added to the Job Involvement questionnaire were age category, length of service on the current job, and educational background.

The Management Style Diagnosis Test. This self-scored test measures the manager's perception of his managerial style as it relates to appropriate situational use of task orientation and relationships orientation. The test is a 56 paired-item, forced-choice questionnaire developed to identify managerial styles and to operationalize the 3-D Theory (Reddin, 1970). The 56 statements which make up the test, pair each style with all eight styles. The manager, then, selects one style statement over another style a total of 56 times.

Using a sample pool of 970, Reddin (1970) examined the reliability of the MSDT. Comparing subcategories of the sample, he consistently found differences in managerial style at the .01 level of significance. Managers whose first degree was in arts (N = 126) were compared to

managers whose first degree was in business (N = 177). Those whose first degree was in business exhibited significantly more bureaucratic behavior than managers with a first degree in arts. Comparing supervisors of line workers in heavy and light manufacturing (N = 37) revealed the line supervisors to be significantly more bureaucratic than the staff supervisors.

Kehoe (1974) of the Organizational Tests Ltd. staff provided additional support for the reliability of the MSDT. Managers in Ireland (N = 128) were compared to managers in corresponding levels outside of Ireland (N = 84). Top managers in Ireland demonstrated the deserter managerial style at a significantly higher level ($P < .01$) than the non-Irish top managers. Managers having fewer than eleven years of education (N = 27) were compared to managers positioned at the same level and having seventeen or more years of education (N = 59) and were found to be more autocratic when tested for managerial style ($P < .01$). Birth order of managers provided reliability data among a group of Canadian managers. Managers who were first children (N = 104), compared with those who were not first children (N = 294) exhibited the developer managerial style significantly more than those who were not first children ($P < .01$). Managers found to be the second child and to have an older sister (N = 45) compared to second children with older brothers (N = 53), exhibited the missionary style at a significantly higher level.

The sample comparison of subcategories in the pool support the accuracy of the MSDT in the areas of stability, repeatibility, and precision (Fox, 1969).

In 1974, Reddin supported the validity of the MSDT through studies using the Management Position Analysis Test. These studies compared two groups on all measures. Ten of the measures of the Management Position Analysis Test are for the eight managerial styles and the task-relationships orientations. These measures were found to clearly discriminate the differences in managerial styles of various groups.

Davies (1972) administered the Blake-Mouton Grid and the MSDT simultaneously to a group of policemen who were candidates for higher positions. Davies concluded that the MDST produced a finer and more creditable analysis of each person's dominant and supporting styles.

It is believed, then, that the test does measure the manager's own perception of his leadership style. Reddin (1970:7) with apparent accuracy said:

> The test does not tell a manager that he is an Autocrat or some other style—only that he, himself, describes his behavior that way.

The Lodahl-Kejner Job Involvement Scale. Thomas Lodahl and Mathilde Kejner (1965) working at Cornell University developed the Job Involvement Scale designed to measure the degree to which a person is identified psychologically with his work. Lodahl and Kejner defined job involvement as the degree to which a person's work performance affects his self-esteem. Lodahl (1964) hypothesized that job involvement is a value orientation toward work developed early in the socialization process. The job involvement scale, developed by Lodahl and Kejner, has two forms, the twenty item scale and the six item scale or short form. The test is cast into the Likert format with four categories of response (strongly

agree, agree, disagree, strongly disagree; scored 1, 2, 3, 4, respectively). The items were stated such that a low score indicates high job involvement. The short form was chosen for this study since Lodahl and Kejner (1965) found that the correlation between the 6-item total and the 20-item total is .87 with 76 percent of the variance in the 20-item total accounted for in the six items. Split-half reliability of the 20-item scale was computed by Lodahl and Kejner (1965) by calculating product-moment correlation coefficients between halves of the scale, using odd-even items as the split. This was done for three different groups, and Lodahl and Kejner reported the reliability adequate with correlations in the samples ranging from .72 to .89.

Validity of the scale was reported by Lodahl and Kejner (1965) as a result of analyses of variance performed on data from the three different groups used in the reliability tests. Other research using this scale has been reported by Siegel (1969), Farris (1971), Hall and Mansfield (1971), Lawler and Hall (1970), Runyon (1973), and Cheloha and Farr (1980).

Collection of the Data

Data were collected from two populations, (1) managerial and (2) subordinate.

Managerial. Thirty-five Collegiate Registrars and Admissions Officers from institutions of higher education in Tennessee completed the Reddin Management Style Diagnosis Test. Both public and private institutions were included. The tests were administered in a group

meeting, and they were self-scored under the direction of a professional with considerable experience working with the Reddin Test. The score card indicating the dominant management style, the institution represented by the manager, the manager's position title, and an assigned number were detached and given to this researcher.

Subordinate. Job involvement scores, using the Lodahl-Kejner Job Involvement Scale (short form), were collected from the subordinates of each manager who participated in the study. These subjects also indicated their age category, length of service on the current job, and educational background. These instruments bore the same number as the score card from the Management Style Diagnosis Test completed by the managers, so that the institution was known only to the researcher, and total anonymity for respondents to the Lodahl-Kejner scale was preserved.

Treatment of the Data

In view of the survey instruments used, the data collected, and the hypotheses to be tested, the statistical measures believed to be most appropriate were chi-square, χ^2, t-test, and analysis of variance. These tests were used to analyze data derived from the Management Style Diagnosis Test, the Lodahl-Kejner Job Involvement Scale, and the three data elements collected with job involvement scores from subordinates. The chi-square, χ^2, statistic tells whether one's observations differ from what is expected by chance at a particular level of significance. The .05 level of significance was used in this technique. The t-test is used to determine whether there are statistically significant

differences between means involving two different treatments, and the analysis of variance statistic tells whether there are statistically significant differences between means involving more than two treatments (Champion, 1970). Tests were applied to data to test the hypotheses of the study in the following manner:

Hypothesis 1. Ho: The management style of the manager is independent of the job involvement scores of the subordinates. The chi-square, χ^2, technique was used to determine differences between frequencies of job involvement scores of subordinates grouped by managerial style of the superior. Tests were performed using both a two by two table of job involvement scores (14 and under and over 14) and the groups of managers, more effective and less effective; and a two by eight table of job involvement scores (14 and under and over 14) and all eight management styles.

The t-test was applied to determine whether there was a statistically significant difference at the .05 level of significance of the means of job involvement scores between subordinates of more effective managers and those of less effective managers. The analysis of variance technique was applied to test for significant differences between means of job involvement scores of subordinates of managers in each of the eight management style categories.

Hypothesis 2. Ho: The management style of the manager is independent of the age of subordinates. The chi-square, χ^2, technique was applied to determine whether there was a statistically significant

difference between age category of subordinates of more effective managers and those of less effective managers. The same technique was applied to determine differences between subordinates of managers for each of the eight management style categories.

Hypothesis 3. Ho: The management style of the manager is independent of the length of service in the current job of subordinates. The chi-square, χ^2, technique was applied to determine whether there was a statistically significant difference between length of service in current job of subordinates of more effective managers and those of less effective managers. The same technique was applied to determine differences between subordinates of managers for each of the eight management styles.

Hypothesis 4. Ho: The management style of the manager is independent of the educational background of subordinates. The chi-square, χ^2, technique was applied to determine whether there was a statistically significant difference between educational background of subordinates of more effective managers and those of less effective managers.

Delimitations

Although a broad range of the facets of organizational behavior are considered in this study, the scope of the investigation was limited to diagnosis of managerial style and effectiveness, job involvement of subordinates of the participating managers, length of service in current job of these subordinates, their age category, and educational background

as they relate to management style and effectiveness. The populations chosen were managers in the areas of admissions and records in institutions of higher education in Tennessee and the nonprofessional subordinates who staff these offices. By delimiting the populations of the study to admissions officers and registrars and their supporting staffs, relatively homogeneous groups were studied.

Limitations

Since the groups studied are relatively homogeneous in kinds of tasks performed, in educational requirements and in outputs required for the positions, the nature of these special purpose groups may limit the generalizability of the results.

Assumptions

The following assumptions were implicit in this study:

1. Respondents provided accurate data for the study.
2. The literature selected for review provided an adequate basis upon which to build the hypotheses of this study.

Definitions

The terms defined here are germane to the Management Style Diagnosis Test and to the general study of leadership.

Autocrat. A manager who uses a high Task Orientation and a low Relationship Orientation when this behavior is not appropriate and who is, therefore, less effective (Reddin, 1970)

Benevolent Autocrat. A manager who uses a high Task Orientation and a low Relationships Orientation when such behavior is appropriate and who is, therefore, more effective (Reddin).

Bureaucrat. A manager who uses a low Task Orientation and a low Relationships Orientation when such behavior is appropriate and who is, therefore, more effective (Reddin).

Compromiser. A manager who uses a high Task Orientation and a high Relationship Orientation in inappropriate situations and is, therefore, less effective (Reddin).

Deserter. A manager who uses a low Task Orientation and a low Relationships Orientation when this behavior is not appropriate and who is, therefore, less effective (Reddin).

Developer. A manager who uses a high Relationships Orientation and a low Task Orientation when such behavior is appropriate and who is, therefore, more effective (Reddin).

Dominant Style. The most frequently used leadership style (Reddin).

Executive. A manager who uses a high Task Orientation and a high Relationships Orientation in situations where such behavior is appropriate, and who is, therefore, more effective (Reddin).

Job Involvement. The internalization of values about the goodness of work or the importance of work in the worth of the person (Lodahl and Kejner, 1965).

Leadership Behavior. Actions and attitudes used by superiors to influence behavior of subordinates (Reddin, 1970).

Managerial Effectiveness. The extent to which a manager achieves the output of the position (Reddin).

Managerial Style. The way in which a manager behaves as measured by the amount of Task Orientation and Relationships Orientation used in managerial situations (Reddin).

Missionary. A manager who uses a high Relationships Orientation and a low Task Orientation when this behavior is not appropriate and who is, therefore, less effective (Reddin).

Relationship Orientation. The extent to which a manager has personal job relationships (Reddin).

Task Orientation. The extent to which a manager directs his own and his subordinate's efforts (Reddin).

Vertical Dyad Linkage. The exchange relationship which develops between superior and subordinate over time (Dansereau, Graen and Haga, 1975).

Organization of Chapters

The study is divided into four chapters. Chapter I includes the (1) introduction to the study, (2) statement of the problem, (3) purpose of the study, (4) design of the study, (5) treatment of data, (6) delimitations, (7) limitations, (8) assumptions, and (9) definitions. Chapter II contains a review of pertinent literature. Chapter III presents the data collected, the treatment of these data, and analyses of the research findings. The summary, conclusions, and recommendations of the study are presented in Chapter IV.

CHAPTER II

REVIEW OF RELATED LITERATURE

I. HISTORICAL PERSPECTIVE

This nation was founded upon the premise that work is good; without work life does not have meaning. Since work is that core of man's existence which gives outward expression to the content of life, it is vital that all persons find in the work experience a means of revealing unique identity; of contributing their unique capabilities to society's good; and of enhancing self-esteem. The organization of society has progressed from very simple structures and relationships to a state of immense complexity. These structures and relationships are responses to the needs of society, and some of the best efforts of many able researchers have been directed toward the development of a body of knowledge to provide a basis for order and predictability within the work organization. This process has been a dynamic force in organizational life since the turn of the century, and its focus has gradually broadened from the "great man" approach to recognition of the importance of the study of subordinate individual and work group characteristics in the development of a basis for understanding organizational effectiveness.

Leadership theory has evolved in a chronological progression since the late nineteenth century. The trait or individual characteristic approach received considerable attention through the first quarter of

the twentieth century. This approach was then superseded by the classical theories which emphasize organizational design and administration. Humanistic theories were next, followed by the development of contingency theory and situational theory. These provided the basis for the more recent research involving the vertical dyad linkage approach and, finally, for the research directed toward the reciprocal influence of managerial-subordinate behaviors.

II. EARLY CONCEPTS

Stogdill (1974:7) began his historical review of early concepts of leadership with a quote from C. H. Cooley:

> . . . the leader is always the nucleus of a tendency, and, on the other hand, all social movements, closely examined, will be found to consist of tendencies having such nuclei.

This attempt to explain leadership is representative of many writers of that era. Leadership was believed to be the function of either the person or the environment. The "great man" or trait approach and the classical theorists dominated the study of leadership during the early years of the twentieth century.

The Trait Approach

Carlyle's belief that the history of the world is history of great men was the guiding dictum for early researchers of organizational behavior. Galton (1879) explained leadership in the context of hereditary background. Woods' study (1913) indicated that the quality of national life among 14 nations could be equated with the ruler's capabilities. Wiggam (1931) believed that an aristocratic class differs

biologically from lower classes and that the superior class must provide leaders. These beliefs undergirded the trait theories since, it was reasoned, if a leader had qualities which set him apart, then it should be possible to identify them. Those which have been shown to be related to effective leadership performance include self-confidence, intelligence, sociability, ambition, perseverence, determination, and height (Porter, Lawler and Hackman, 1975).

Gradually, the explanation of leadership as a function of the attributes of a single individual gave way to consideration of organizational purposes along with the search for factors which produce organizational effectiveness and efficiency (Etzioni, 1964).

The Classical Approach

The classical or scientific management theory emphasized the organization. Workers were perceived to be motivated solely by economic considerations, and managerial responsibilities focused on time and motion studies in order to elicit maximum productivity from the worker. Division of labor and specialization characterize this organizational theory. Frederick W. Taylor who is considered to be primarily responsible for the development of classical management theory intended to study the interaction of the worker and the industrial machine; however, this purpose faded as he came to view man as a subordinate of the machine. This emphasis on organizational efficiency provided the basis for classical organizational theory (Stogdill, 1974).

The Bureaucracy

Max Weber, a German, developed the concept of bureaucracy. This concept presents the formal organization as the means for controlling participants in order to maximize efficiency while minimizing the unhappiness of subordinates who are controlled. Rationality and impersonality are primary characteristics. Authority and its legitimation are basic to the bureaucracy. The organization, to some extent, must rely upon power to ensure conformity to rules and regulations. Reward and punishment are tools which encourage compliance, but without legitimation, this compliance is superficial. The concept of legitimation brings a new dimension to the study of organizational control. Weber referred to power as the ability to enforce acceptance of orders; legitimation as the acceptance of the power of the leader, and to authority as power that is legitimate. Characterizing this formal organization are the pyramid of control leading up to one center of authority, task specialization, and the mechanism for control to produce accountability (Etzioni, 1964).

Conclusion

Early researchers of organizational behavior concentrated on the identification of those human traits which produce good leaders. This emphasis gave way to the search for the best organizational design. Tall organizations, small spans of control, and high task specialization are characteristics of the classical design. These efforts also produced the bureaucracy. Classical theory assumes the economic nature of man.

Reaction to classical or scientific management and to classical design, a vehicle for control of subordinates and emphasizing productivity, gave birth to the Human Relations approach.

III. HUMAN RELATIONS THEORY

Organizational research concentrating on formal aspects of the organization gave way to new directions in the late 1920's. Elton Mayo and his associates founded a new school of thought which gave emphasis in the study of organizational behavior to the role of communication, participation, and leadership. Mayo's research indicated that: (1) the productivity of a worker is not determined by physical capacity, but is a function of his social being; (2) noneconomic rewards are central to the motivation and satisfaction of the worker; (3) the most efficient method of division of labor is not contained in the degree of task specialization; and (4) subordinates do not respond to management as individuals but as group members (Hersey and Blanchard, 1977).

These new insights gave rise to the development of a divergent thrust in organizational research. In addition to Mayo, among the behaviorists who made significant contributions to this effort were Maslow (1943), Argyris (1953), Likert (1958, 1959), McGregor (1960), Herzberg (1968) and Blake and Mouton (1964).

Elton Mayo: The Hawthorne Studies

Mayo and his Harvard associates conducted a series of studies at the Western Electric Company's Hawthorne Works in Chicago from 1927 to 1932. The findings of this series of studies were largely responsible

for the change in the orientation of organizational research. The studies revealed that changes in physical working conditions were not effective agents for improving worker productivity, but dramatic increases in production were outcomes of the social factors involved in the studies. Quite unintentionally, the researchers had provided the workers a feeling of importance, feelings of affiliation, competence, and achievement, and a sense of participating in the operation of the company (Roethlisberger and Dickson, 1939).

The implications of the Hawthorne studies were clear. Management must study and understand relationships among people. Work was not merely an exchange of human energy for money. Additionally, managerial assumptions concerning the nature of man must change. To Mayo, man was not an economic being; he was social in nature and he had a strong need to be associated in work with his fellows (Vroom, 1964). Abraham Maslow (1943) developed a theory of motivation based on human needs.

Maslow: Hierarchy of Needs

Although Mayo recognized that human workers experience needs in the work world, it was left to Maslow (1943) to develop this approach to the understanding of organizational behavior. His theory holds that human needs arrange themselves into a hierarchy with the basic physical needs at the bottom of the hierarchy. As these basic needs are satisfied then a higher order of needs becomes important. The hierarchy moves from physiological needs to those for safety and security, and then to social needs. Following satisfaction of these, needs for esteem and recognition become active and, finally, the need for self-actualization becomes a

motivating force. This need creates a drive to reach one's potential. Maslow, however, was careful to state that these are not absolutes. A need may be somewhat gratified, but not totally so, when other needs emerge as dominant forces. This framework for understanding human behavior has provided valuable insights into motivation as it relates to organizational behavior. Douglas McGregor (1960) based his new approach to management and motivation on Maslow's theory of a human needs hierarchy.

McGregor: Theory X-Theory Y

McGregor (1960), like Maslow, suggested that the physiological and safety needs of man have to a significant degree been satisfied, and that management should focus on the workers' higher order needs. It is to the task of management that McGregor addressed his work. There are, he said, two quite different views of management's task. The conventional view holds that workers are resources to be organized in the interest of economic goals. Implicit in this view are some beliefs about the nature of man: he is lazy; lacks amibition; he is indifferent to organizational needs; he is resistant to change, gullible and not very bright. McGregor labeled this view "Theory X." For his Theory Y, McGregor proposed quite a different managerial task and a different set of assumptions about the nature of man. The primary task, he said, is to order organizational affairs and operations so that workers can accomplish their individual goals by directing their own efforts toward organizational goals. Undergirding this task statement are new assumptions about the nature of man. These are: work is as natural as play for man; the capability

for finding creative solutions to organizational problems is widely dispersed in the population; motivation occurs at all levels of the hierarchy of needs; and workers can be self-directed and innovative at work if they are motivated.

McGregor expressed faith in the contributions of social science to management theory, in the application of these talents to the "human side of enterprise," and in managerial ability to enhance the satisfaction of worker needs through work itself. Chris Argyris (1957) at Yale University studied industrial organizations to determine how managerial behaviors affected individual behavior.

Argyris: Immaturity-Maturity Theory

Argyris (1957) believed that individuals mature in seven distinct phases measurable on a continuum, and he believed that management practices may inhibit individual maturation processes. The organizational design of which the classical theorists speak serves to neutralize individual differences and to retard individual growth. This fundamental conflict may be overcome when leadership provides opportunities for subordinates to make creative contributions which benefit the organization and satisfy individual needs simultaneously. The validity of this concept was demonstrated in an experiment designed by Argyris in which workers were assembling an electronic device using the conventional assembly line. He changed the procedure to allow for job enlargement as well as job enrichment. The results were notable in that production was increased and errors and waste decreased. Another Human Relations proponent

who continued to influence leadership theory is Rensis Likert (1958, 1959).

Likert: Management Systems

Likert (1959) joined Mayo, Maslow, McGregor, and Argyris in the belief that leadership is an interaction process involving organizational needs and individual needs of subordinates. Working at the University of Michigan, Likert helped to implement organizational change in numerous industrial settings. It was his purpose to assist organizations to move from Theory X to Theory Y assumptions, to promote the maturation process in subordinate organizational behavior, and to identify and emphasize subordinate motivators. These experiences led Likert to believe that management styles may be charted on a continuum from System 1 through System 4. System 1: Management is characterized by tight control, no confidence in subordinates, no participation in decision making, and little management-subordinate interaction. System 2: Control is still concentrated at the top management level; though, some decisions are made at a lower level. There is a reward and punishment system which operates in a master-slavelike environment and is used to motivate workers. System 3: Some confidence in subordinates exists, since some decision making power is delegated downward, and some communication moves upward as well as downward. Some of the control processes are delegated downward, which may permit the development of an informal organization. System 4: Subordinates enjoy the complete confidence of management, and they participate freely in the decision making process. There is much interaction between superior-subordinate

and subordinates accept broad responsibilities for the organization. There is an informal organization which is supportive of stated organizational goals.

Likert and his associates developed an instrument by which organizations may rate their management system. The use of this instrument indicated that the closer an organization is rated to System 4, the greater is its productivity, and likewise, the closer it approximates System 1, the lower is its productivity.

Likert's work indicated that leader behavior most conducive to subordinate productivity is employee-control. Frederick Herzberg and his associates (1957) in studies at Case-Western Reserve University, continued to develop the theme of McGregor, Argyris and Likert that knowledge about the nature of man, how he reacts to organizational stimuli and why he reacts to these stimuli is of critical importance to organizations.

Herzberg: Motivator-Hygiene Theory

Herzberg (1967), upon completion of an extensive study, concluded that the primary determinants of subordinate satisfactions are intrinsic factors including recognition, achievement, responsibility, advancement, and competence. These he called motivators because employees were thought to feel compelled to obtain more of them through performance of organizational tasks. Dissatisfaction, said Herzberg, is caused by a separate set of factors which are extrinsic to the work itself. These are called "hygiene factors," and they include salaries, company policies, working conditions, and interpersonal relationships on the job. The

motivators may be equated with Maslow's esteem and self-actualization needs, while the hygiene factors may be equated with part of the esteem needs, the social, safety, and physiological needs. Herzberg explained that satisfied hygiene needs tend to reduce or eliminate dissatisfaction, but they do not motivate employee performance; however, satisfaction of motivators permits an employee to mature which in turn enhances performance. Herzberg also advocated increasing the job responsibilities, scope, and thus challenge in work in order to promote growth of motivator factors.

The research emphasis continued to be that of subordinate characteristics and needs. Other researchers who studied attitudinal dimensions of workers are Blake and Mouton (1964).

Blake and Mouton: The Managerial Grid

The theories discussed above are human relations or interaction oriented as opposed to a task or an organizational orientation. Blake and Mouton (1964) developed a managerial grid to depict these dimensions. Concern for people represents the vertical axis, and concern for productivity represents the horizontal axis. As the leader's rating moves up the vertical axis, people become more important to him. A rating of 9 represents maximum concern for people. Indications of concern for organizational goals or production increase as this rating advances on the horizontal scale. Maximum concern for production is represented by a rating of 9. The leader who rates high on both scales develops subordinates who are committed to organizational goals and cultivates an environment of mutual trust and respect.

Conclusion

Beginning with Mayo and the Hawthorne studies, organizational research took new directions. These directions included recognition of individual needs identified by Maslow; assumptions about the nature of man identified by McGregor; the natural conflict between organizational goals and employee needs proposed by Argyris; the interaction process existent between management and employee as theorized by Likert; the motivation theories of Herzberg; and the recognition of the integrals "concern for people" and "concern for production" as presented by Blake and Mouton.

The next major thrust of leadership research began at Ohio State University in 1945. The emphasis of the research was equally divided between the individual leader and the situation in which he functioned.

IV. SITUATIONAL LEADERSHIP

Stogdill (1948) in his extensive review of studies relating to leadership factors concluded that the qualities, characteristics, and skills required in a leader are determined to a large extent by the demands of the situation in which he is to function as a leader. The leadership studies at Ohio State University which began in 1945 attempted to identify dimensions of leader behavior. Eventually, the dimensions "Initiating Structure" and "Consideration" emerged. Eminent among contributions to the Situational Leadership Theory are Hemphill (1949), Fiedler (1958), Hersey and Blanchard (1977), Reddin (1970), and Dansereau, Graen and Haga (1975).

Hemphill: Situational Factors in Leadership

Hemphill, in research published in 1949 by Ohio State University, attempted to identify the characteristics of group situations as they relate to leader behavior. He believed that these characteristics determine the standards by which leader behavior is evaluated. Both the behavior of the leader and the behavior of the group were studied. Two group characteristics, viscidity and hedonic tone, were identified as those directly influenced by the leadership behavior. Viscidity may be defined as the cohesion or togetherness feeling experienced by the group, and hedonic tone is descriptive of the general tone of pleasantness associated with group membership.

Perhaps the primary values of the Hemphill study lie in the establishment of the situational approach to the study of leadership and in the identification of group dimensions which are directly related to leader behavior. The concept of adaptive leadership behavior grew from the knowledge that a single "best" type of leadership behavior is impossible to describe. Hersey (1967:15) said

> . . . the more a manager adapts his style of leader behavior to meet the particular situation and the needs of his followers, the more effective he will tend to be in reaching personal and organizational goals.

Fred Fiedler (1958) presented three situational variables as determinants of a favorable or unfavorable situation for a leader.

Fiedler: Leadership Contingency Theory

An important integral of Fiedler's Leadership Contingency Theory (Fiedler, 1967) is "favorableness of the situation." This he defined

as the degree to which the situation permits the leader to influence the actions of his group. The variables which determine the favorableness are position power, task structure, and leader member relations. Additionally, Fiedler identified one measurable leadership characteristic which consistently relates to effective leadership. Sometimes the relationship is positive, sometimes negative, contingent upon the situation. This characteristic, esteem for one's "least preferred coworkers" is said to interact with the three situational characteristics. The study indicated that a leader who describes his least preferred coworker in a somewhat favorable manner tends to be human relations oriented and considerate, while the leader who describes his least preferred coworker in a less favorable manner tends to be more task or structure oriented. Having developed a method for classifying group situations and a model for characterizing leader behavior, Fiedler concluded that (1) task oriented leaders tend to perform better in very favorable or very unfavorable situations; and (2) relationships oriented leaders perform better in situations described as being intermediate in favorableness.

Halpin and Winer (1957) also identified dimensions of leader behavior. These were called "consideration" and "initiating structure." Consideration referred to leader behavior relating to friendship, mutual trust, respect, and warmth, while "initiating structure" referred to behavior in which the leader organized and defined group activities. Fiedler's Leadership Contingency Theory (1967) incorporated these concepts.

Hersey and Blanchard: The Life Cycle Theory of Leadership

The Life Cycle Theory of Leadership developed at Ohio University and published by Hersey and Blanchard in 1969, is based in the Tri-Dimensional Leader Effectiveness Model (Hersey and Blanchard, 1977). The theory addresses the relationship between task behavior and relationships behavior of the leader and the maturity level of the followers. Life Cycle Theory holds that as the level of maturity of followers increases, appropriate leader behavior requires less structure and increasing consideration. Eventually, maturity levels should promote decreased levels of consideration. Maturity is defined as achievement motivation, willingness and ability to take responsibility, and work revelant education and experience. Like Argyris' Immaturity-Maturity continuum, the definition refers to psychological age rather than chronological age.

The model has four quadrants descriptive of leadership behavior: (1) low task and low relationships; (2) high task and low relationships; (3) high relationships and low task; and (4) high task and high relationships. Appropriate leadership style for subordinates of below average maturity is quadrant 1, for subordinate of average maturity, quadrants 2 and 3 are believed to be appropriate; and for those of above average maturity, quadrant 4 is appropriate.

The authors believed that through behavior modification leadership style can be adjusted, and this would effect changes in maturity. To effect changes, Hersey and Blanchard advocated Lewin's change processes of unfreeze, change, and refreeze. The Life Cycle Theory of leadership

encompasses the precepts of Maslow's Hierarchy of Needs, Argyris' Immaturity-Maturity continuum, McGregor's Theory X and Theory Y, and Likert's Management Systems.

Reddin: The 3-D Theory

Reddin (1970) presented the 3-D Theory. This is a situational theory, and it seems to be rather closely related to Fiedler's Contingency Theory. Both are concerned with leadership effectiveness, and both are concerned with tasks and relationships. Reddin has identified five elements in a situation which a manager must recognize, respond to, or change. These are subordinates, technology, organization, superiors, and coworkers. Interactions with these elements are determined by leader task orientation and relationships orientation, and they fall into four basic styles. These are: Related, Integrated, Separated, and Dedicated. Reddin's research has indicated that no one of these styles is more or less effective in itself. Effectiveness is determined by the situation in which it is used. This means, then, that each of the four basic styles has a less effective equivalent and a more effective equivalent. These compose the eight managerial styles.

These eight styles are names given to the basic styles when used appropriately or inappropriately. Using these, a third dimension, effectiveness, is added.

When used inappropriately and therefore less effectively		When used appropriately and therefore more effectively
	Basic Style	
Compromiser	INTEGRATED	Executive
Deserter	SEPARATED	Bureaucrat
Autocrat	DEDICATED	Benevolent Autocrat
Missionary	RELATED	Developer

Reddin (1970:47-48) defined the eight styles in the following manner:

Executive: A manager who uses a high Task Orientation and a high Relationships Orientation in a situation where this behavior is appropriate.

Compromiser: A manager who is using a high Task Orientation and a high Relationships Orientation in a situation that requires a high orientation to only one or neither and who is, therefore, less effective; perceived as being a poor decision maker, as one who allows various pressures in the situation to influence him too much, and as avoiding or minimizing immediate pressures and problems rather than maximizing long-term production.

Benevolent Autocrat: A manager who is using a high Task Orientation and a low Relationships Orientation in a situation where such behavior is appropriate and who is, therefore, more effective; perceived as knowing what he wants and how to get it without creating resentment.

Autocrat: A manager who is using a high Task Orientation and a low Relationships Orientation in a situation where such behavior is inappropriate and who is, therefore, less effective; perceived as having no confidence in others, as unpleasant, and as interested only in the immediate task.

Developer: A manager who is using a high Relationships Orientation and a low Task Orientation in a situation where such behavior is appropriate and who is, therefore, more effective; perceived as having implicit trust in people and as being primarily concerned with developing them as individuals.

Missionary: A manager who is using a high Relationships Orientation and a low Task Orientation in a situation where

such behavior is inappropriate and who is, therefore, less effective; perceived as being primarily interested in harmony.

Bureaucrat: A manager who is using a low Task Orientation and a low Relationships Orientation in a situation where such behavior is appropriate and who is, therefore, more effective; perceived as being primarily interested in rules and procedures for their own sake, as wanting to control the situation by their use, and as conscientious.

Deserter: A manager who is using a low Task Orientation and a low Relationships Orientation in a situation where such behavior is inappropriate and who is, therefore, less effective; perceived as uninvolved and passive or negative.

Reddin said, then, managerial style, with its added dimension of effectiveness, could not be understood with reference to managerial behavior only. Style is also related to the demands of the situation. In assessing this managerial style, two things must be considered. One is behavior which is expressed in task orientation and relationships orientation, and the other is the demand of the situation. If the behavior does not fit the demand of the situation, then it may be labeled as one of the less effective styles. If the behavior is appropriate to the situation, one of the more effective style labels applies.

All eight of these managerial style labels have been useful in describing managerial behavior. More comprehensive descriptions are possible by extending these concepts to include those of dominant style and supporting style. A manager's dominant style is that basic style most frequently used. A manager's supporting style is that basic style next most frequently used after the dominant style.

To make his theory operational, Reddin designed the Management Style Diagnosis Test, the purpose of which is to identify styles of

managers and of organizations. Its validity in identifying styles has been established, and its primary purpose is that of a training instrument. The test consists of fifty-six pairs of statements. The manager is asked to pick one statement from each pair which best describes his behavior in his present job in the situation described. Scoring of this test measures a manager's perception of his management style in his present position. Scores are plotted on a chart and reveal the extent to which each style is exhibited by the manager. There is usually a dominant style and a supporting style indicated. This profile is extremely useful in revealing the extent to which the manager reads situations correctly or incorrectly.

In addition to the style profile, the test produces three diagnostic dimensions: Task Orientation, Relationships Orientation, and Effectiveness Level. In this sense, it gives some indication of organizational philosophy implicit in that specific organization.

The Vertical Dyad Linkage Approach

Dansereau, Graen, and Haga (1975) used an alternative approach to the study of leadership. They suggested that two assumptions underlying conventional leadership theory may be false. These are: (1) members of an organizational unit who report to the same manager are homogeneous to the extent that they can be considered as a single entity or a distinct work group; and (2) a manager behaves in essentially the same manner toward each of his subordinates. The alternative approach suggested emphasizes the vertical dyads and the relationship between the manager and subordinate in that dyad. In this approach both manager and

subordinate are subjects of investigations of the leadership process. Jacobs (1971) suggested that a superior may exhibit behaviors involving both leadership (influence without authority) and supervision (influence based only upon authority). This raises the question as to when the superior will behave as a leader and when he will behave as a supervisor. Dansereau, Graen, and Haga (1975) believed that investigation of the vertical dyad linkages may reveal some of the conditions surrounding the emergence of leadership and supervision. The distinction between leadership and supervision is critical to the understanding of the concept of the vertical dyad relationship. In the supervision technique, the superior relies upon the formal employment agreement in the dyad exchange. In the leadership technique, the basis of influence is contained in the interpersonal relationship exchange between the superior and the subordinate. In this exchange, the superior can offer influence in decision making, open communications, and consideration for the subordinate. In return, the subordinate may offer a greater measure of job involvement.

The Dansereau, Graen, and Haga study (1975) hypothesized that negotiating latitude granted for job related matters will when given in generous amounts produce leadership relations and when given in small amounts will produce supervision relations. It was found as expected that organizational units were differentiated based upon the relationships between the superior and each of his subordinates. The results indicate that a superior in granting latitude to negotiate his work role may gain an extra dimension of commitment to organizational goals by the

subordinate. Leadership, the authors concluded, can only occur in the vertical dyad. This would mean, of course, that the study of leadership should address the exchange process between the leader and each of his subordinates. Graen and Schiemann (1978) maintained that agreement between a leader and a subordinate concerning the meaning of mutually experienced situations will vary as a function of the quality of their dyadic relationship. According to this hypothesis, dyads with higher quality interdependencies will exhibit higher agreement than dyads with lower quality interdependencies. Quality in this context refers to a range of relationships from a partnership at the high end of the continuum to a unidirectional downward influence at the low end of the continuum. This investigation indicated that the linkages between a leader and each of the members within a unit are heterogeneous, and each vertical dyad must be treated as a unit for analysis and a unit of leadership.

Conclusion

Hemphill (1949) concluded that there are no absolute leaders, since successful leadership is always contingent upon both the leader and the specific requirements imposed by the nature of the group to be led. This view has been perpetuated by other situational leadership researchers such as Fiedler, Hersey and Blanchard, Reddin, and Dansereau, Graen and Haga.

V. THE RECIPROCAL INFLUENCE APPROACH

For many years researchers have directed attention to leader behavior as the primary integral of organizational effectiveness. Alternative research strategies have now brought into question the traditional models, and the concept of leadership as an exchange relationship is gaining acceptance. While there is much empirical evidence to indicate that leadership style affects subordinate attitudes and performance (Dawson, Messe, and Phillips, 1972; Jones, Gergen, Gumpert, and Thibaut, 1965); however, Lowin and Craig (1968) cited indications that subordinate characteristics can cause the leader to vary his style of leadership. Greene (1975) found that subordinate behavior causes variations in leader emphasis on consideration and structuring, and Runyon (1973) found subordinate personality variables to significantly mediate the relationships between manager and subordinate. Crowe, Bochner, and Clark (1972) in their study learned that the influence of subordinate personality characteristics is strong enough to elicit a response from managers which is opposite to their own preference.

Job involvement has been identified as an important personality variable which may influence managerial style and effectiveness. Additionally, individual differences in age category, length of service in position, and educational background have been suggested as subordinate characteristics which may impact on managerial style and effectiveness.

Job Involvement

In 1965, Lodahl and Kejner articulated a definition of job involvement and developed a scale for measurement. This definition and device for measurement have provided the basis for much research over the last fifteen years. Defined by Lodahl and Kejner as the degree to which a person is identified psychologically with his work, the concept of job involvement has now broadened and is generally considered to be multidimensional. Rabinowitz and Hall (1977) believed that job involvement encompasses two different concepts: (1) performance-self-esteem contingency and (2) component of self-image. The first concept would include those definitions which pertain to the extent to which self-esteem is affected by performance level. The component of self-image concept is consistent with the Lodahl-Kejner definition. Additional insights are provided by Rabinowitz and Hall in their three theoretical perspectives on job involvement; first as an individual difference variable; then as a function of the situation; and, finally, as an individual-situation interaction.

An individual difference variable. This perspective holds that job involvement is intimately related to the Protestant Work Ethic and a sense of personal responsibility. This view, conceived by Dubin (1956), was reinforced by Lodahl (1964) who maintained that job involvement is a value orientation learned quite early in the socialization process and which is brought by the individual to the work situation.

A function of the situation. Vroom (1962) suggested that job factors may determine the degree to which a worker is involved in his

job. Ego involvement in work performance is influential to the extent that performance is believed by the worker to be relevant to competencies and other attributes central to his self-concept. Vroom, then, believed that job involvement is situationally influenced. McGregor (1960) and Argyris (1964) also placed the responsibility for employee behavior on the organization. Bass (1965) believed that the personality variable, ego-involvement in work, may be strengthened by situational characteristics.

An individual-situation interaction. Lawler and Hall (1970) suggested that the most realistic view is that of individual-situation interaction, and Farris (1971) believed that job involvement is a function of the interaction of an individual with his environment. Blauner (1964) also hypothesized that work involvement emanates from personal control, association with others, and a sense of purpose.

Evidence of considerable weight, however, points to job involvement as a general value orientation which is learned, which figures importantly in one's self-esteem, and which reinforces the belief that work holds intrinsic satisfactions. These personal attributes, collectively called job involvement, are believed to influence managerial style and effectiveness through subordinate personality variables, satisfaction, and through performance.

Personality variables. Runyon (1973) investigated the relationship between management style and the subordinate personality variable, locus of control. This concept refers to a socioculturally learned belief

that a person can or cannot control his own destiny. If a person believes that reinforcement is contingent upon his own actions, this person is said to believe in "internal" control. If a person believes that reinforcement is contingent upon outside influences, then he is said to believe in "external" control. Runyon's study hypothesized that internals and externals will react differently to styles of supervision. As internality increases and the subordinate perceives himself as better able to control his own destiny, he will react positively and reinforcingly to superior consideration and more negative reaction is expected toward structuring. The work situation is seen as an opportunity to demonstrate competence for the internal. This reinforces the self-esteem motive, which is believed to enhance performance levels.

Crowe, Bochner, and Clark (1972) completed a similar study using the variables democratic and autocratic. The results indicated that the influence of subordinates is strong enough to elicit a response from managers which is opposite to their own preference. Identified characteristics, then, of subordinates have predictable effects on managerial behavior.

Subordinate satisfaction. Lowin and Craig (1968) also cited indications that subordinate characteristics can cause the leader to vary his style of leadership. A subordinate's expression of satisfaction with work would provide reinforcement for the leader who would in turn develop a more positive attitude toward the subordinate and would engage in less structuring behavior. More consideration would be exhibited.

Performance. There is much research to support the thesis that leader behavior influences subordinate behavior (Korman, 1966; Stogdill, 1974). There is, however, considerable evidence to support the contention that the reverse is also true. Lowin and Craig (1968) said that subordinate performance strongly influences leadership styles in the areas of closeness of supervision, initiating structure, and consideration for subordinates. Farris and Lim (1969) also found subordinate performance to be a cause as well as a consequence of leader behavior. Greene (1975) found that subordinate performance causes leader emphasis on consideration, and Barrow (1975) indicated that performance influences leader behavior. Barrow introduced the idea that the nature of effective leadership resides in the manager's subordinates.

Rabinowitz and Hall (1977:284) presented a profile of the job involved person based upon their review of organizational research on job involvement. The job involved person

> is a believer in the Protestant Ethic
> is older
> has internal locus of control
> has strong growth needs
> has a stimulating job
> participates in decisions affecting her or him
> is satisfied with the job
> has a history of success
> is less likely to leave the organization

These characteristics are believed to strongly influence managerial style and effectiveness.

Age Category

Age has been shown to be related to job involvement (Lodahl and Kejner, 1965), and job involvement has been identified as a personal

characteristic of the worker which significantly influences managerial behavior on the dimensions consideration and initiating structure. Schwyhart and Smith (1972) also found age to have a significant correlation with job involvement, as did Jones, James, and Bruni (1975). Persons who were found to have higher job involvement tended to be older. Runyon (1973) focusing on the locus of control, internal and external classifications; indicated that older workers tended to be more internal; more satisfied with their supervision; and tended to informally associate with supervisory groups; and thus to influence leader behavior to a greater extent.

Length of Service on Current Job

Wernimont (1966) found a tendency for the older employee who had been with the company for a long time to include more intrinsic items in describing satisfying work situations. Intrinsic items including achievement, responsibility, and the work itself were shown to be satisfiers, and subordinate satisfaction was shown by Lowin and Craig (1968) to moderate leader behavior on the consideration and structuring dimensions. Tannenbaum and Schmidt (1958) identified subordinate forces which shape leadership styles, and among these were included knowledge and length of service or experience. Wickert (1951) studying approximately 600 female telephone operators found that turnover was related to ego-involvement in the job. Those with longer periods of employment with the company believed that they had the opportunity to participate in decision making and that they were making an important contribution to the success of the company. This ego involvement may

be equated with the Lodahl-Kejner model of job involvement, and it could then be said to moderate managerial style. The Lodahl and Kejner study (1965), however, indicated that job involvement does not change over time with length of service. This would call into question the conclusion drawn from the Wickert study.

Educational Background

Rabinowitz and Hall (1977) reported mixed results in the investigations of educational background as a moderating factor in the job involvement scores of subjects. Siegel and Ruh (1973) found no direct relationship between job education and job involvement. Jones, James, and Bruni (1975) concluded that there was no relationship between years of education and job involvement, and Ruh and White indicated that for rank and file workers, education was negatively related to job involvement. Gurin, Veroff, and Feld (1960), however, found a significant positive relationship between job involvement and years of relevant education. The groups with higher education were reported to have greater ego-involvement because of the centrality of the job to their need gratification.

Conclusion

Leadership style and effectiveness have been the focus of much research for almost a century. As the body of knowledge has increased, the approach to the research has changed from the very early "great man" or trait approach, to the classical theories emphasizing organizational design and administration. These were followed by the human relations

theories. Many concepts underlying these were included in the contingency and situational theories with one thrust being the vertical dyad linkage approach. Much contemporary research is directed toward the reciprocal influence of managers and subordinates and the subordinate characteristics which mediate managerial style and effectiveness.

CHAPTER III

COLLECTION, PRESENTATION AND ANALYSIS OF DATA

I. INTRODUCTION

The purpose of this study was to collect data and apply statistical tests to these data to determine the existence of a statistically significant relationship between managerial style and effectiveness and selected subordinate characteristics. The purpose of this chapter is to detail the procedures followed in collection of the data; to present the data; and to present analyses of these data.

II. PROCEDURES

Sample Selection

There were two distinct populations involved in this study. They were: (1) managers and (2) subordinates of these managers.

Managers. The thirty-five managers who submitted the Management Style Diagnosis Test were among those Deans and/or Directors of Admissions and Records from institutions of higher education in Tennessee who participated in a management seminar at the 1980 Annual Conference of the Tennessee Association of Collegiate Registrars and Admissions Officers. All seminar participants completed the Management Style Diagnosis Test, and those wishing to participate in this study were asked to turn in the scored portion of the test form to this

researcher. Of the 42 managers who completed the test, 35 submitted the scored portion for inclusion in this study. Participants represented institutions from the entire spectrum of institutions of higher education in Tennessee including large state universities, community colleges, technical institutes, and private colleges and universities.

The scored card submitted to the researcher bore the name of the institution, and the position title of the participant. If an institution had more than one participant, subordinate survey scores were grouped with the respective manager's test results.

Subordinates. Nonprofessional staff members of the participating managers were requested to complete the Lodahl-Kejner Job Involvement Scale (short form) and the three additional items: age category, length of service in current job, and educational background. Staff members of every participating institution responded constituting a sample size of 279.

Instrumentation

A survey of relevant literature revealed the existence of two instruments already widely used which would facilitate the desired analyses. These are the Management Style Diagnosis Test and the Lodahl-Kejner Job Involvement Scale.

The Management Style Diagnosis Test. For diagnosis of managerial style and effectiveness, the commercially distributed Management Style Diagnosis Test was used. This test was developed by William J. Reddin and presented in Managerial Effectiveness (1970). The test, consisting

of 56 pairs of forced choice statements, reveals the manager's dominant style response to situations utilizing the dimensions of task orientation and relationships orientation. Scoring reveals two broad classifications each composed of four styles. These are: more effective managers whose dominant styles are executive, developer, benevolent autocrat or bureaucrat; and less effective managers whose dominant styles are autocrat, missionary, compromiser or deserter. This test reveals the manager's perception of his managerial style behavior in given situations.

The Lodahl-Kejner Job Involvement Scale. The short form of this instrument was used to collect data from the nonprofessional staff members associated with the respective managers who completed the Management Style Diagnosis Test. The Likert format of the survey form yielded job involvement scores for the participants with higher job involvement indicated by lower job involvement scores.

Collection of Data

Collection of data from the managerial population was completed during the management seminar held as a part of the Fall 1980 Conference of the Tennessee Association of Collegiate Registrars and Admissions Officers. The short form of the Lodahl-Kejner Job Involvement Scale and the request for three elements of demographic information were mailed to nonprofessional staff members of managers participating in the study. Response was received from staff members of each of the participating managers.

Treatment of the Data

Job involvement scores and demographic data were collected from the sample populations and these are presented in Tables I and II. These are arranged by managerial style classification. The statistical measures believed to be most amenable to analysis and interpretation of these data were chi square (χ^2), t-test, and analysis of variance. These techniques were selected because the data do meet the assumptions of the level of measurement required by the statistical procedures. The chi-square, χ^2, tells whether observations differ from what is expected by chance when chance is defined according to a particular set of rules (Champion, 1970). The t-test is a procedure which assumes interval level data, and it is a statistical test of differences of means. The analysis of variance test specifically tests the hypothesis that there are no differences between sample means.

III. PRESENTATION AND ANALYSIS OF DATA

Tables I and II contain the data gathered from the subordinate populations, and they are grouped according to the self-perceived management style of the respective managers. These data were used to test four hypotheses.

Hypothesis 1: The management style of the manager is independent of the job involvement scores of the subordinates.

Table III is a chi-square table showing observed and expected frequencies of job involvement scores of subordinates of less effective

TABLE I

COMPILATION OF JOB INVOLVEMENT SCORE FREQUENCIES OF NONPROFESSIONAL STAFF MEMBERS IN OFFICES OF ADMISSIONS AND RECORDS OF INSTITUTIONS OF HIGHER EDUCATION IN TENNESSEE (1980-1981 ACADEMIC YEAR)

Management Style	High Involvement ← Scores												→ Low Involvement				
	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Mean
	Frequencies																
Autocrat	0	0	2	0	4	2	7	4	5	8	3	7	1	3	2	0	16.29
Deserter	0	0	1	1	8	5	2	6	6	4	9	0	7			0	15.74
Compromiser	2	0	2	2	2	6	6	4	4	6	6	5	2	0	1	0	15.31
Missionary	2	1	2	1	0	1	1	1	0	1	0	2	1	0	1	1	14.31
Developer	1	1	2	2	1	5	3	1	2	2	5	2	2	0	2	1	15.43
Benevolent Autocrat	0	1	2	2	0	7	4	4	10	4	3	2	2	0	1	1	15.44
Bureaucrat	0	0	2	0	4	1	2	3	0	2	0	0	0	0	0	0	13.42
Executive	0	1	1	2	5	8	3	5	0	1	1	0	1	0	0	0	13.46

TABLE II

COMPILATION OF DEMOGRAPHIC DATA FROM NONPROFESSIONAL STAFF MEMBERS IN OFFICES OF ADMISSIONS AND RECORDS OF INSTITUTIONS OF HIGHER EDUCATION IN TENNESSEE (1980-1981 ACADEMIC YEAR)

	Frequencies										
	Length of Service				Age				Educational Background		
Style	Less than 1 yr.	1-3 yrs.	3-5 yrs.	More than 5 yr.	Under 25	25-34	35-44	45 and over	High School	College less than 2 yrs.	College 2 yrs. or more
Autocrat	10	8	6	25	3	14	5	27	18	14	17
Deserter	13	16	8	13	13	18	8	11	12	18	20
Compromiser	9	17	4	18	11	13	6	18	15	16	17
Missionary	2	7	2	5	5	8	2	1	0	9	7
Developer	11	9	5	7	9	9	6	8	9	7	16
Benevolent Autocrat	12	8	7	16	6	16	6	15	14	21	8
Bureaucrat	5	3	3	3	3	6	2	3	3	3	8
Executive	5	3	3	3	3	6	2	3	3	3	8

TABLE III

CHI-SQUARE TABLE OF JOB INVOLVEMENT SCORE FREQUENCIES OF NONPROFESSIONAL SUBORDINATES OF DEANS AND/OR DIRECTORS OF ADMISSIONS AND RECORDS OF INSTITUTIONS OF HIGHER EDUCATION IN TENNESSEE WHOSE SELF PERCEPTIONS CLASSIFY THEM AS LESS EFFECTIVE OR MORE EFFECTIVE MANAGERS (1980-1981 ACADEMIC YEAR)

	14 and Under	Over 14
	Observed	
Less Effective	61	106
More Effective	60	52
	Expected	
Less Effective	72.4	94.57
More Effective	48.57	63.42

N = 279

$\chi^2 = 7.25$

> 6.635

$P < .05$

managers and those of more effective managers. Cell 1 reports frequencies of job involvement scores 14 and under for subordinates of less effective managers. Cell 2 indicates frequencies of job involvement scores of over 14 for less effective managers. Cell 3 reports frequencies of job involvement scores 14 and under for more effective managers, and Cell 4 reports frequencies of job involvement scores of over 14 for more effective managers. Low job involvement scores are indicative of high job involvement. The expected frequencies are also reflected in Table I.

Table IV presents observed and expected frequencies of job involvement scores of subordinates categorized 14 and under and over 14 for each of the four less effective management styles and for each of the four more effective styles.

The t-test was applied to determine if there was a significant difference between the means of the job involvement scores of subordinates of less effective managers and those of more effective managers. Calculations for the t-test were performed using the following formula:

$$\frac{\bar{X}_{LE} - \bar{X}_{ME}}{\sqrt{\frac{S_{ME}^2}{N_{ME}} + \frac{S_{LE}^2}{N_{LE}}}}$$

Application of this formula to the data yielded the following:

$$t = \frac{15.6 - 14.73}{\sqrt{\frac{(3.24)^2}{117} + \frac{(3.35)^2}{162}}} = \frac{.87}{\sqrt{.159}} = 2.18 > 1.65 \quad (P < .05)$$

TABLE IV

CHI-SQUARE TABLE OF JOB INVOLVEMENT SCORE FREQUENCIES OF NONPROFESSIONAL SUBORDINATES OF DEANS AND/OR DIRECTORS OF ADMISSIONS AND RECORDS OF INSTITUTIONS OF HIGHER EDUCATION IN TENNESSEE GROUPED ACCORDING TO THE SELF-PERCEIVED MANAGEMENT STYLE OF THE MANAGER (1980-1981 ACADEMIC YEAR)

	Style	14 and Under	Over 14
		Observed	
Less Effective	Autocrat	15	33
	Deserter	20	37
	Compromiser	17	24
	Missionary	9	7
More Effective	Developer	15	17
	Benevolent Autocrat	16	27
	Bureaucrat	9	5
	Executive	20	8
		Expected	
Less Effective	Autocrat	20.8172	27.1828
	Deserter	24.7204	32.2796
	Compromiser	17.7814	23.2186
	Missionary	6.93907	9.06093
More Effective	Developer	13.8781	18.1219
	Benevolent Autocrat	18.6487	24.3513
	Bureaucrat	6.07168	7.92832
	Executive	12.1434	15.8566

$N = 279$

$\chi^2 = 17.8979$ on 7 df

> 14.0671

$P < .05$

The analysis of variance technique was applied to test for significant differences between means of job involvement scores of subordinates of each of the eight management styles. Table V presents these data. With the sums of squares between samples of 216.77 and the sums of squares within samples of 2856.16, the total variation is 3072.93. On 278 degrees of freedom, the F value is 2.94 and is statistically significant.

Hypothesis 2: The managerial style of the manager is independent of the age of subordinates.

The chi-square, χ^2, technique was applied to determine whether there was a statistically significant difference between age category of subordinates of more effective managers and those of less effective managers.

In the data collected, subordinates were categorized into four age groups: under 25, 25-34 years, 35-44 years and over 45 years of age. However, in order to avoid the distortion which results when the expected frequency in any cell in a chi-square table is less than 5, the cells were collapsed to reflect only two age categories: under 35 and 35 and over. Table VI presents these data in the chi-square format.

Hypothesis 3: The management style of the manager is independent of the length of service in the current job of subordinates.

The chi-square, χ^2, technique was applied to determine whether there was a statistically significant difference between length of service in current job of subordinates of more effective managers

TABLE V

SUMMARY OF ANALYSIS OF VARIANCE BETWEEN MEANS OF JOB INVOLVEMENT SCORES OF NONPROFESSIONAL SUBORDINATES OF DEANS AND/OR DIRECTORS OF ADMISSIONS AND RECORDS OF INSTITUTIONS OF HIGHER EDUCATION IN TENNESSEE GROUPED ACCORDING TO THE SELF-PERCEIVED MANAGEMENT STYLE OF THE MANAGER (1980-1981 ACADEMIC YEAR)

Source of Variance	Sum of Squares	df	Mean Square	F
Between Samples	216.77	7	30.97	2.94
Within Samples	2856.16	271	10.54	
Total	3072.93	278		

N = 279

F = 2.94

> 2.64

P < .05

TABLE VI

CHI-SQUARE TABLE OF AGE CATEGORY FREQUENCIES OF NONPROFESSIONAL SUBORDINATES OF DEANS AND/OR DIRECTORS OF ADMISSIONS AND RECORDS OF INSTITUTIONS OF HIGHER EDUCATION IN TENNESSEE GROUPED ACCORDING TO THE SELF-PERCEIVED MANAGEMENT STYLE OF THE MANAGER (1980-1981 ACADEMIC YEAR)

	Style	Under 35	Over 35
		Observed	
Less Effective	Autocrat	17	31
	Deserter	31	19
	Compromiser	24	24
	Missionary	13	3
More Effective	Developer	18	14
	Benevolent Autocrat	22	21
	Bureaucrat	9	5
	Executive	20	8
		Expected	
Less Effective	Autocrat	26.4946	21.5054
	Deserter	27.5986	22.4014
	Compromiser	26.4946	21.5054
	Missionary	8.83154	7.16846
More Effective	Developer	17.6631	14.3369
	Benevolent Autocrat	23.7348	19.2652
	Bureaucrat	7.7276	6.2724
	Executive	15.4552	12.5448

$N = 279$

$\chi^2 = 17.1937$ on 7 df

> 14.0671

$P < .05$

and those of less effective managers. Table VII is a chi-square table in which the cells containing frequencies of length of service of subordinates are collapsed to reflect the categories of "less than 3 years" and "3 years or more." This table reflects expected and observed frequencies for each of the eight management styles.

Table VIII presents the same data with the observed and expected length of service frequencies grouped into four categories: less than 1 year, 1-3 years, 3-5 years, and over 5 years. In this table, the management styles are grouped into two categories: less effective and more effective.

Hypothesis 4: The managerial style of the manager is independent of the educational background of subordinates.

The chi-square, χ^2, technique was applied to determine whether there was a statistically significant difference between educational background of subordinates of more effective managers and those of less effective managers. In the attempt to apply this technique using all eight management style categories, expected cell frequencies precluded this application. Cells were collapsed dividing management styles into two categories: less effective and more effective. Table IX presents these data.

Analysis of the Data

Specific objectives of the study were to test four hypotheses. Data have been presented indicating results of the statistical tests.

TABLE VII

CHI-SQUARE TABLE OF LENGTH OF SERVICE CATEGORY FREQUENCIES OF NONPROFESSIONAL SUBORDINATES OF DEANS AND/OR DIRECTORS OF ADMISSIONS AND RECORDS OF INSTITUTIONS OF HIGHER EDUCATION IN TENNESSEE GROUPED ACCORDING TO THE SELF-PERCEIVED MANAGEMENT STYLE OF THE MANAGER (1980-1981 ACADEMIC YEAR)

	Style	Less than 3 years	3 years or more
		Observed	
Less Effective	Autocrat	18	30
	Deserter	29	21
	Compromiser	26	22
	Missionary	9	7
More Effective	Developer	20	12
	Benevolent Autocrat	20	23
	Bureaucrat	8	6
	Executive	22	6
		Expected	
Less Effective	Autocrat	26.1505	21.8495
	Deserter	27.2401	22.7599
	Compromiser	26.1505	21.8495
	Missionary	8.71685	7.28315
More Effective	Developer	17.4337	14.5663
	Benevolent Autocrat	23.4265	19.5735
	Bureaucrat	7.62724	6.37276
	Executive	15.2545	12.7455

N = 279

χ^2 = 14.3765 on 7 df

> 14.0671

P < .05

TABLE VIII

CHI-SQUARE TABLE OF LENGTH OF SERVICE CATEGORY FREQUENCIES OF NONPROFESSIONAL SUBORDINATES OF DEANS AND/OR DIRECTORS OF ADMISSIONS AND RECORDS OF INSTITUTIONS OF HIGHER EDUCATION IN TENNESSEE WHOSE SELF-PERCEPTIONS CLASSIFY THEM AS LESS EFFECTIVE OR MORE EFFECTIVE MANAGERS (1980-1981 ACADEMIC YEAR)

	Less than 1 year	1 to 3 years	3 to 5 years	Over 5 years
		Observed		
Less Effective	34	48	20	50
More Effective	40	30	18	29
		Expected		
Less Effective	42.9677	45.2903	22.0645	51.6774
More Effective	31.0323	32.7097	15.9355	37.3226

N = 279

χ^2 = 8.50658 on 3 df

> 7.81473

P < .05

TABLE IX

CHI-SQUARE TABLE OF EDUCATIONAL BACKGROUND CATEGORY FREQUENCIES OF NONPROFESSIONAL SUBORDINATES OF DEANS AND/OR DIRECTORS OF ADMISSIONS AND RECORDS OF INSTITUTIONS OF HIGHER EDUCATION IN TENNESSEE WHOSE SELF-PERCEPTIONS CLASSIFY THEM AS LESS EFFECTIVE OR MORE EFFECTIVE MANAGERS (1980-1981 ACADEMIC YEAR)

	High School	Less than 2 yrs. college	Two years or more of college
		Observed	
Less Effective	44	56	62
More Effective	31	37	49
		Expected	
Less Effective	43.5484	54	64.4516
More Effective	31.4516	39	46.5484

N = 279

χ^2 = .410182 on 2 df

Not Significant

Hypothesis 1: The management style of the manager is independent of the job involvement scores of the subordinates.

This hypothesis stated in null form is a model used to determine whether managers whose style falls into one of the four more effective categories tend to have subordinates whose job involvement scores indicate high job involvement. Table III, p. 50, indicates that there is a statistically significant difference at the .05 level between job involvement scores of subordinates of managers whose self-perceived managerial behavior places them in the more effective management style categories and job involvement scores of subordinates of managers whose dominant style is one of the less effective styles. These data indicate that managers whose style is among the more effective categories do have subordinates whose job involvement scores indicate significantly greater job involvement. The null hypothesis, then, should be rejected.

Table IV, p. 52, is a chi-square table of frequencies of subordinate job involvement scores, with the observed and expected frequencies categorized by the eight management styles. These data also indicate a statistically significant difference between job involvement scores of subordinates of managers of the eight styles. Among the less effective categories of managers, only the "missionary" managers had subordinates whose observed job involvement score frequencies exceeded the expected frequencies for the group scoring 14 and under. The observed frequency of those scoring over 14 was less than the expected frequency for the missionary category. Among the more effective categories of managers,

only the "benevolent autocrats" had subordinates whose observed job involvement score frequencies of over 14 exceeded the expected frequency.

Frequencies of observed job involvement scores 14 and under were greater than the expected frequencies for the Executive, Bureaucrat, and Developer styles, and frequencies of observed job involvement scores over 14 were greater than the expected frequencies for the Compromiser, Deserter, and Autocrat styles. (The lower the job involvement score, the greater is the job involvement.)

The t-test applied to the means of job involvement scores of subordinates of less effective managers and those of more effective managers yielded a t score of 2.18 which is greater than 1.65 on a one tailed test. There is a statistically significant difference between the means of job involvement scores of subordinates of less effective managers and the means of job involvement scores of subordinates of more effective managers. The means of job involvement scores of subordinates of more effective managers indicate that these subordinates are more attitudinally involved in their jobs than are subordinates of less effective managers. This again confirms that the null hypothesis should be rejected.

The final test performed using the data derived from the subordinate job involvement scores was the analysis of variance which tested for significant differences between means of job involvement scores of subordinates of each of the eight management styles.

The analysis of variance test revealed significant differences among the means of job involvement scores of subordinates of the eight

management styles. The means in ranked order indicate that subordinates of the Bureaucrat style are most attitudinally involved with their jobs. These are followed by subordinates of the Executive, Missionary, Compromiser, Developer, Benevolent Autocrat, Deserter and Autocrat. Results of the analysis of variance provide further support for the hypothesis that subordinates of the eight management styles differ along the dimension of job involvement. This is further support for the rejection of the null hypothesis.

The chi-square statistic, χ^2, the t-test and the analysis of variance, all reveal that statistically significant differences exist between job involvement attitudes of subordinates of less effective managers and those of more effective managers as well as among all eight management styles. More effective managers tend to have subordinates who are more involved with their jobs.

Hypothesis 2: The managerial style of the manager is independent of the age of the subordinates.

Data collected provided four subordinate age categories; however, in order to meet the "expected" table requirement of 5 or more in each cell, categories were collapsed into two groups: under 35 and over 35. Data were analyzed by application of chi-square. Table VI, p. 55, contains these data. Results of this application indicate that there is a statistically significant difference in age categories of subordinates of the eight management styles.

The observed frequencies of subordinates under 35 years of age of the Executive, Bureaucrat, and Developer styles all exceed the expected

frequencies. The observed frequencies of subordinates over 35 years of age exceed the expected frequencies for the Compromiser and Autocrat managers. Observed frequency of subordinates under 35 years of age exceeds the expected frequency for the Missionary managers. With the exception of the Benevolent Autocrat, more effective managers tend to have younger subordinates. The autocrat managers have more subordinates over 35 years of age than expected.

Hypothesis 3: The management style of the manager is independent of the length of service of subordinates in the current job.

Table VII, p. 56, reflects data gathered from subordinates of managers whose self-perceptions have grouped them into the eight management styles. In this 2 × 8 table expected and observed frequencies of subordinates with less than three years of service in their current job and for those with three years or more of service in the current job for each of the eight managerial styles are shown. These data indicate a statistically significant difference in length of service of subordinates of managers among the eight management styles.

For three of the four more effective categories of managers, the observed frequency of subordinates with less than three years of service in the current job exceeds the expected frequency with the Executive category reflecting the greatest difference in observed and expected frequencies.

Among the less effective categories of managers, the Autocrats tend to have more subordinates with more than 3 years of service in the

current job. Table VIII, p. 58, also depicts the application of chi-square to data gathered from subordinates relating to length of service in the current job. Managers are grouped into two categories: less effective and more effective. Length of service is reflected as less than one year, one to three years, three to five years, and over five years. Again, there is a significant difference. More effective managers tend to have subordinates who have been in the current job a shorter period of time.

The greatest differences between observed and expected frequencies of length of service of subordinates of less effective managers and more effective managers occur in the category of less than one year of service and the category of over five years of service in the current job. The observed frequency of subordinates with less than one year of service exceeds the expected frequency for more effective managers and the observed frequency of subordinates with more than five years of service exceeds the expected frequency for less effective managers.

Hypothesis 4: The managerial style of the manager is independent of the educational background of subordinates.

Table IX, p. 59, reflects the chi-square analysis for educational background of subordinates of less effective and those of more effective managers. Frequencies for three categories of achievement were collected: high school graduate, less than two years of college and two years or more of college. There is no statistically significant difference in educational background of subordinates of less effective

managers and those of more effective managers. The null hypothesis, therefore, failed to be rejected.

In summary, the data gathered from the Management Style Diagnosis Tests and from the responses to the Lodahl Kejner Job-Involvement survey form were found to be significant.

Specifically, chi-square tables of frequencies of job involvement scores revealed that more effective managers had subordinates who were more attitudinally job involved. Among all eight managerial categories, the Missionary, Developer, Bureaucrat, and Executive managers had subordinates who scored best on the job involvement scale. Only the Missionary category is classified as less effective. The t-test performed on means of job involvement scores of subordinates of less effective managers and those of more effective managers reveal statistically significant differences between the means. Additionally, the analysis of variance test performed using the means of job involvement scores of subordinates of each of the eight management styles indicated statistically significant differences in the means among the styles.

Chi-square computations indicated that there were statistically significant differences in age categories of subordinates of the eight styles. The more effective managers tended to have subordinates who were under 35 years of age, and the less effective managers tended to have subordinates who were over 35 years of age. Also, the more effective managers tended to have subordinates who had been in the current job less than three years. The less effective managers tended

to have subordinates who had been in the current job longer than three years.

Chi-square computations indicated that there were no statistically significant differences between educational background of subordinates of more effective managers and subordinates of less effective managers.

In this chapter the data were presented along with an analysis of these data as they relate to each of the four hypotheses. In the next chapter observations about the data are summarized. Implications and recommendations for further research are also presented.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. INTRODUCTION

This chapter contains a summary of the preceding chapters, as well as the conclusions which resulted from the statistical examination of data collected to test the null hypotheses. These conclusions provide the basis for the recommendations concerning further study of the problem.

II. SUMMARY

The study of leadership or managerial behavior has been actively pursued over the past century. As the body of knowledge has grown, theory has been expanded and, at the same time, refined. Leadership theory has progressed through several phases; the individual trait approach; classical theory; the humanistic approach; then contingency and situational theories were developed. The current themes of research may be characterized as those directed toward the reciprocal influence of managerial-subordinate behavior and subordinate characteristics which mediate managerial style and effectiveness.

The specific purpose of this study was to determine whether managers whose self perceptions as revealed by the Management Style Diagnosis Test categorize them as more effective have subordinates who differ in job involvement, age category, length of service in the job, and

educational background from subordinates of managers whose self-perceptions categorize them as less effective.

Data were collected from two populations. Deans and/or Directors of Admissions and Records in institutions of higher education in Tennessee completed Reddin's Management Style Diagnosis Test, and the dominant management style of each was determined. The nonprofessional subordinates of each of these managers completed the Lodahl-Kejner Job Involvement Scale (short form), and they also submitted information regarding age category, length of service in the current job, and educational background. These data were used to test four hypotheses:

1. The management style of the manager is independent of the job involvement scores of subordinates.

2. The management style of the manager is independent of the age of subordinates.

3. The management style of the manager is independent of the length of service of subordinates in their current job.

4. The management style of the manager is independent of the educational background of subordinates.

The major findings of the study indicated that all of the null hypotheses except hypothesis 4 should be rejected. Specifically, the chi-square technique revealed significant differences between observed frequencies of job involvement scores of subordinates of more effective managers and those of less effective managers and frequencies of each group expected by chance. Subordinates of more effective managers were more attitudinally involved with their jobs than subordinates of less

effective managers. Among the eight categories of management styles, subordinates of the Executive, Bureaucrat, Developer, and Missionary styles tended to be more job involved. The t-test performed on the means of job involvement scores of subordinates of more effective managers and those of less effective managers revealed a significant difference, with the means of the scores of subordinates of more effective managers indicating greater job involvement. The analysis of variance performed to test for differences between means of job involvement scores of subordinates of all eight management styles also revealed significant differences among these means.

The chi-square technique applied to age category data of subordinates revealed significant differences between age categories of subordinates of more effective managers and those of subordinates of less effective managers. More effective managers tended to have subordinates in younger age categories.

Chi-square analyses performed on length of service data indicated that there were significant differences between length of service in the current job of subordinates of more effective managers and those of less effective managers. More effective managers had subordinates with shorter lengths of service in the current job. Among all eight styles, the Executive style manager had significantly more subordinates with shorter length of service than expected, and the Autocrat had a significantly greater number of subordinates who had been in the current job for longer periods of time.

Application of the chi-square technique indicated that there were no statistically significant differences in educational backgrounds

of subordinates of more effective managers and those of less effective managers.

With the exception of educational background, significant differences were found to exist between subordinates of more effective managers and those of less effective managers on all characteristics tested. Significant differences were also found among the subordinates of the eight management styles on job involvement, age category, and length of service.

III. CONCLUSIONS

The conclusions of this study were drawn from the statistical tests of the hypotheses. Data derived from the Management Style Diagnosis Test, the Lodahl-Kejner Job Involvement Scale, and three elements of demographic data collected from respondents to the Job Involvement Scale formed the basis for the study. Concluding remarks focus on these findings.

Subordinate characteristics mediate managerial behavior. Attitudes of high job involvement brought to the work situation facilitate more effective management styles. Additionally, younger subordinates and those who have shorter periods of service in the job promote effective management. The subordinates who are most job involved and who are younger both in age and in length of service facilitate a management style incorporating high task and high relationships orientations. This style is identified as the Executive style. Though Reddin's style system places the Missionary style among the less effective styles,

these managers also had subordinates whose characteristics approximate those of subordinates of Executive style managers. The subordinates who are least job involved are older and have longer periods of service in the current job promote the high task-low relationships management style identified by Reddin as the Autocrat style.

In summary, job involvement or psychological identification with one's work, age, and length of service in the job significantly influence the management style of the manager.

Discussion

The findings and conclusions of this study relating to job involvement of subordinates are generally consistent with the theoretical framework from which this study was designed.

The findings and conclusions, however, regarding the relationship of subordinate age and length of service and effective management are not consistent with findings of studies performed by Schwyhart and Smith (1972) and Jones, James and Bruni (1975). These studies indicated that the person who was older and who had a longer period of service with the organization tended to have more positive influence on managerial behavior. In this study, it was the younger subordinate with the shorter period of service who appeared to facilitate effective management.

Since the specific functions of the subordinate population studied involved interpersonal relationships with college students, the performance and job involvement of the younger subordinates may have been enhanced through their propensity for personal identification with

the tasks to be performed and the students for whom the services were provided. This enhanced performance level and job involvement level would then be expected to facilitate effective management.

The findings of this study which indicated that subordinates of managers who self-perceptions classified them as Missionary (a less effective style) approximate on the job involvement dimension subordinates of managers classified as Executive (a more effective style) were not surprising, because the managers whose dominant style was Missionary all represented small, special purpose institutions where commitment to the basic philosophy and purpose of the institution is a primary consideration for employment.

Central to the findings and conclusions of the study is the idea that subordinates may bring to the job situation certain characteristics which influence leadership behavior. It becomes imperative, then, that careful attention be turned toward the recruitment and selection of subordinate personnel.

IV. RECOMMENDATIONS

The findings and conclusions of this study generated the following recommendations:

Since the populations from whom data were collected were relatively homogeneous in organizational structure and in function, it is recommended that this study be replicated involving different populations in order that the results may be more broadly generalized.

Other subordinate characteristics such as role-relationships and self-image should be studied in relationship to managerial style and

effectiveness. Since there is little research reported which involves nonprofessional, white-collar personnel, it is recommended that these studies be conducted among these populations.

More research on job involvement is needed. While studies completed by Dubin (1956), Vroom (1962), Lodahl and Kejner (1965), Maurer (1969), Siegal (1969), and Lawler and Hall (1970) all conclude that job involvement is a personality characteristic brought by the employee to the job, there is some evidence that job situational variables may affect the level of job involvement. Efforts to identify these variables should be continued. Future research should also be concerned with the process of change over time in job involvement levels. It is possible that the aging process and social as well as work experiences may influence over time the level of job involvement.

This study has provided some evidence that certain subordinate characteristics do influence managerial style; however, there is evidence that reciprocal influence occurs between manager and subordinate which affects the behaviors of both. Future research should be directed toward experiments and investigations which would permit inferences of cause and effect to be made.

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APPENDIXES

APPENDIX A

Subordinate Survey Form
The Lodahl-Kejner Job Involvement Scale and Demographic Data

1. Length of time in your current position:

   less than one year ____ one year to three years ____
   three years to five years ____ more than five years ____

2. Age: under 25 years of age ____
   25 to 35 years of age ____
   35 to 45 years of age ____
   45 and over ____

3. Educational background:

   1. high school graduate ____
   2. college: two years or less ____
   3. college: more than two years ____

Below you will find a number of statements dealing with attitudes toward work. Please indicate your attitudes toward your own present work by giving your degree of agreement or disagreement with each statement. Write the number 1, 2, 3, or 4 on the line just before the number of each statement.

1 means you Strongly agree

2 means you Mildly agree

3 means you Mildly disagree

4 means you Strongly disagree, with the statement

_____1. The major satisfactions in my life come from my work.
_____2. The most important things that happen to me involve my work.
_____3. I'm really a perfectionist about my work.
_____4. I live, eat, and breathe my job.
_____5. I am very much involved personally in my work.
_____6. Most things in life are more important than work.
Total (leave blank) _____

Please check to see that you have answered every question according to the instructions.

APPENDIX B

Dear Admissions/Records Staff Members:

In my doctoral work at The University of Tennessee, it became apparent that there is a sparsity of research relating to work group members. This lack of research has stimulated me to investigate the relationship of job involvement and other individual characteristics of subordinates to managerial style and effectiveness.

As part of my study, I am requesting that you complete the attached form. Since there are only nine questions, it should be accomplished very quickly. Though your supervisor has already expressed a willingness to participate in this study, your participation is totally voluntary. Your supervisor has agreed to delegate to someone in your group the responsibility for administering and collecting the questionnaire, so that your response is unknown to him/her. No person completing the questionnaire will be personally identified.

You should be aware that the return of the survey form indicates your willingness for me to use the information you submit as part of the data I will use in the development, analysis, and evaluation of my research project. There is no risk or penalty, of course, should you decide not to respond. The benefits, however, may include greater understanding of the relationships between manager and subordinates as well as provide insights into those elements conducive to success in the work world.

If you would like additional information about this project, please contact me at the address indicated below. I shall be happy to reply to your inquiries immediately. Also, you should be aware that should you wish to withdraw your consent to participate and to have your data withdrawn, you certainly may do so without fear of ill will or prejudice from me or anyone else.

Please be reminded that should you return the questionnaire, this constitutes your agreement to participate in the study under the guidelines outlined in this letter. Thank you for your consideration.

A stamped envelope is enclosed for your convenience.

Sincerely,

Mrs. Louise R. Greene
P.O. Box 4
Kingston, TN 37763

VITA

Louise Skinnell Roberts Greene was born in Bedford, Virginia, to Mr. and Mrs. James Rush Skinnell. She received her formal educational training in the local school system and in Bedford Business School. Upon completion of the business program, she was for ten years associated as a personnel assistant with Carbide Nuclear Company at Oak Ridge, Tennessee.

In 1967, she began fulltime work toward an undergraduate degree in Education at The University of Tennessee, Knoxville. The B.S. degree in Secondary Education was completed in 1970, and during the 1970-1971 school year, she taught sociology at Oak Ridge High School. In August, 1971, she began an association with Roane State Community College which has continued to the present time. Her position in the beginning was that of Director of Admissions and Records. She is now Director of Educational Services, and her responsibilities have broadened to include Academic Advisement, Extended Services, and Community Relations. In March of 1974, she earned the Master's degree in Educational Administration and Supervision at The University of Tennessee, Knoxville.

She was married to the late Judge Sterling Roberts from 1950 until his death in 1967. Two daughters, Lucinda Roberts Baird and Elizabeth Roberts Heaton were born to them. In 1972, she was married to Raymond Aubrey Greene, Jr.

In 1978, Louise Roberts Greene began work on the Doctor of Education degree at The University of Tennessee, Knoxville. She was awarded this degree in Educational Administration and Supervision in December, 1981.