

1978

**A study of the interrelationships among perceived leader behavior of principals, assessments of organizational output and teacher morale in the secondary schools of the Roman Catholic diocese of Richmond**

Mitchell James Hartson  
*College of William & Mary - School of Education*

Follow this and additional works at: <https://scholarworks.wm.edu/etd>



Part of the [Educational Administration and Supervision Commons](#)

---

**Recommended Citation**

Hartson, Mitchell James, "A study of the interrelationships among perceived leader behavior of principals, assessments of organizational output and teacher morale in the secondary schools of the Roman Catholic diocese of Richmond" (1978). *Dissertations, Theses, and Masters Projects*. William & Mary. Paper 1539618354.

<https://dx.doi.org/doi:10.25774/w4-7sms-r042>

This Dissertation is brought to you for free and open access by the Theses, Dissertations, & Master Projects at W&M ScholarWorks. It has been accepted for inclusion in Dissertations, Theses, and Masters Projects by an authorized administrator of W&M ScholarWorks. For more information, please contact [scholarworks@wm.edu](mailto:scholarworks@wm.edu).

## INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.
2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again -- beginning below the first row and continuing on until complete.
4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.
5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

**Xerox University Microfilms**

300 North Zeeb Road  
Ann Arbor, Michigan 48108

7819919

HARTSON, MITCHELL JAMES

A STUDY OF THE INTERRELATIONSHIPS AMONG  
PERCEIVED LEADER BEHAVIOR OF PRINCIPALS,  
ASSESSMENTS OF ORGANIZATIONAL OUTPUT AND  
TEACHER MORALE IN THE SECONDARY SCHOOLS OF  
THE ROMAN CATHOLIC DIOCESE OF RICHMOND.

THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA,  
ED.D., 1978

A STUDY OF THE INTERRELATIONSHIPS AMONG PERCEIVED  
LEADER BEHAVIOR OF PRINCIPALS, ASSESSMENTS OF  
ORGANIZATIONAL OUTPUT AND TEACHER MORALE IN  
THE SECONDARY SCHOOLS OF THE ROMAN  
CATHOLIC DIOCESE OF RICHMOND

---

A Dissertation  
Presented to the  
Faculty of the School of Education  
The College of William and Mary in Virginia

---

In Partial Fulfillment  
Of the Requirements for the Degree  
Doctor of Education

---


by  
Mitchell James Hartson  
March 1978


APPROVAL SHEET

We the undersigned do certify that we have read this dissertation and that in our individual opinions it is acceptable both in scope and quality as a dissertation for the degree Doctor of Education

Accepted March 1978 by

  
Robert Maidment, Ed.D.

  
Roger R. Ries, Ph.D.

  
Armand J. Galfo, Ed.D., Chairman of  
Doctoral Committee

## Dedication

This study is dedicated to my wife, Billie Kay, and our children, Jimmy, Julie and Amy.

## Acknowledgments

To Professor Armand J. Galfo, I express my sincere appreciation for his assistance in the role of my adviser during doctoral studies and particularly during the work on the dissertation. I am grateful for the generous support and suggestions given to me by Doctor Robert Maidment and Doctor Roger R. Ries.

I gratefully acknowledge the cooperation of Sister Lourdes Sheehan of the Roman Catholic Diocese of Richmond, without whose support, the study would not have been possible. Deep appreciation is extended to the principals and teachers of the secondary schools of the Diocese of Richmond who gave of their time and energies to participate in the study.

Two individuals in my work environment at the U. S. Army Quartermaster School were particularly supportive of my doctoral work. Mr. William H. Pittman encouraged me in my work and permitted me to use data collected from students in my on-the-job professional project. A special acknowledgment is also due Mr. Charles E. Fulmore who cooperated fully with me during the period of my residency. The support of these two individuals came at critical periods in my doctoral studies and is sincerely appreciated.

## Table of Contents

	Page
Dedication . . . . .	iii
Acknowledgments. . . . .	iv
List of Tables . . . . .	ix
Chapter	
1. Introduction . . . . .	2
Statement of the Purpose. . . . .	7
Significance of the Study . . . . .	7
Theoretical Background. . . . .	9
Definitions, Constructs, and Hypotheses . . . . .	14
Definitions. . . . .	14
Constructs . . . . .	15
Hypotheses . . . . .	17
Organization of Study . . . . .	18
2. Review of Related Literature and Research. . . . .	19
Review of Related Literature. . . . .	19
The Evolution of Leadership Theory . . . . .	19
Trait Theory. . . . .	19
Behavioral Leadership Theories. . . . .	21
Situational Leadership Theories . . . . .	25
The Importance of Morale in Industry and Educa- tion. . . . .	27
Role of Demographic Variables . . . . .	29



	Page
The Relationship Between Morale and Productivity . . . . .	30
The Systems Approach and Education . . . . .	32
Review of Related Research on the Ohio State	
Leadership Theory. . . . .	35
Industrial/Military Studies Investigating the Effects of Leadership on Morale and Productivity. . . . .	36
Educational Studies Investigating the Effects of Leadership on Morale and Productivity . . . . .	40
Educational Studies Investigating Differential Perceptions of Leadership Behavior. . . . .	42
3. Methodology. . . . .	46
Locale of the Study . . . . .	46
Selection and Description of the Sample . . . . .	46
Data Collection Procedures. . . . .	48
Description of the Research Instruments . . . . .	50
Leadership Behavior Description Questionnaire. . . . .	50
Reliability/Validity. . . . .	51
Rationale for Selection of the LBDQ . . . . .	52
Purdue Teacher Opinionnaire. . . . .	53
Administration and Scoring. . . . .	56
Interpretation of Scores. . . . .	58
Reliability/Validity. . . . .	58
Rationale for Selection of the PTO. . . . .	62

	Page
The Organizational Questionnaire . . . . .	64
Administration and Scoring. . . . .	69
Interpretation of Scores. . . . .	71
Reliability/Validity. . . . .	71
Rationale for Selection of the OQ . . . . .	74
Research Design and Data Analysis . . . . .	77
Design of the Study. . . . .	77
Data Analyses. . . . .	78
Analysis of Variance. . . . .	78
Partial Correlation Analysis. . . . .	80
Analysis of Covariance. . . . .	80
4. Results. . . . .	82
Hypothesis 1. . . . .	83
Hypothesis 2. . . . .	86
Hypothesis 3. . . . .	91
Hypothesis 4. . . . .	94
5. Summary, Discussion and Recommendations. . . . .	101
Summary . . . . .	101
Questions. . . . .	102
Hypotheses . . . . .	103
Findings . . . . .	104
Discussion. . . . .	105
Leadership Behavior and Teacher Morale . . . . .	105
Leadership Behavior and Teacher Assessments of Organizational Output . . . . .	106

	Page
Leadership Behavior, Teacher Morale and Assessments of Organizational Output. . . . .	107
Perceptions of Leadership Behavior and Teacher Status. . . . .	107
Recommendations . . . . .	108
 Appendix	
A. Letter of Authorization to Conduct Study . . . . .	114
B. Letter of Solicitation for Research. . . . .	115
C. Description of Dissertation. . . . .	116
D. Demographic Data Questionnaire . . . . .	117
E. Authorization to Use the Organizational Questionnaire.	118
F. Acquisition of the <u>Leader Behavior Description Questionnaire</u> . . . . .	119
G. Acquisition of the <u>Purdue Teacher Opinionnaire</u> . . . . .	120
H. Individual Subject Scores on All Scales. . . . .	121
References . . . . .	126

List of Tables

Table		Page
1.	Purdue Teacher Opinionnaire Scores . . . . .	59
2.	Median Scores by Factor. . . . .	61
3.	Dimensions and Subcategories of the Organizational Questionnaire . . . . .	65
4.	Correspondence Between Verbal Ratings of Organizations and Mean OQ Scores on Form Q for the Ten OQ Sub- categories. . . . .	73
5.	Reliability Coefficients (Pearson) Between First and Second Administration of the Organizational Ques- tionnaire . . . . .	75
6.	Analysis of Variance--Teacher Morale . . . . .	84
7.	Multiple Classification Analysis--Teacher Morale . . . . .	85
8.	Scheffé Test--Teacher Morale and Leadership Behavior . . . . .	87
9.	Analysis of Variance--Assessments of Organizational Output. . . . .	89
10.	Multiple Classification Analysis--Organizational Output. . . . .	90
11.	Scheffé Test--Assessments of Organizational Output and Leadership Behavior . . . . .	92
12.	Analysis of Variance--Perceptions of Leadership Behavior. . . . .	96

Table	Page
13. Analysis of Covariance--Perceptions of Leadership Behavior. . . . .	97
14. Multiple Classification Analysis--Perceptions of Leadership Behavior . . . . .	99
15. Individual Subject Scores on All Scales. . . . .	121

A STUDY OF THE INTERRELATIONSHIPS AMONG PERCEIVED  
LEADER BEHAVIOR OF PRINCIPALS, ASSESSMENTS OF  
ORGANIZATIONAL OUTPUT AND TEACHER MORALE IN  
THE SECONDARY SCHOOLS OF THE ROMAN  
CATHOLIC DIOCESE OF RICHMOND

## Chapter 1

### Introduction

Our educational institutions place a high premium on people who have the ability to direct the achievement of organizational goals. More than ever before, efforts today are expended on ways to locate executive talent. Faced with a widening gap between resources and demands placed upon the schools, educational leaders will need to give unprecedented attention to leadership behavior and how it may affect the attainment of organizational goals. In short, the improvement of school productivity has become a matter of urgent necessity for educational systems in both the public and private school sectors of our nation (Halleck, 1967).

The building of effective organizations is of concern in today's world. Organizational theorists and practitioners are defining organizational effectiveness not only in terms of high production and lower costs, but also in terms of human values and expectations. The rapid rate of change, together with the rising expectations of all members of society, have led those responsible for the leadership of educational and industrial institutions to become aware of the necessity for making those organizations responsive to the needs of their employees (Knowles, 1970).

Leadership is a word that is often encountered in the field of educational administration. Frequently, school people speak of the importance of their leadership roles. Upon brief examination it becomes

apparent that the word "leadership" has a variety of meanings (Hunt & Gibson, 1965). Fiedler (1967), after reviewing the definitional problems, defines the leader as "the individual in the group given the task of directing and coordinating task relevant group activities" (p. 8). Sergiovanni and Carver (1973) expand Fiedler's definition so as to include the group maintenance component of leadership behavior. The definition of leadership was thus expanded: ". . . the school executive is the individual charged with the tasks of directing and coordinating the group activities necessary to achieve or change goals" (p. 196).

While speaking of the importance of leadership, Gibson and Hunt (1965) hold that it is a talent that is prized in our society. According to Likert (1961), the problem of how best to organize the efforts of individuals to achieve organizational objectives has been a difficult problem encountered by organized man. In recent years the application of modern research methods has enabled investigators to study objectively and analyze the phenomena involved in organizational functioning. It is now possible to quantify such dimensions of organizational life as morale, motivation and productivity. Filley and House (1969) maintain that while leadership has been widely researched, it remains as the least understood variable in the management process.

Theorists in the behavioral sciences tell us that leaders perform their roles in an environment characterized by differences in people. They emphasize the importance of understanding individual differences among members of the organization.

Mackenzie and Corey (1954) stress that leadership behavior is influenced greatly by perceptions of the situation. The implications of perceptual differences in leadership behavior were discussed:



1. Most behavior can be explained as an attempt to preserve integrity and maintain self-esteem.
2. Behavior is determined by the individual's perception of the total situation and its requirements.
3. People react differently to the same situation because each person's perception of the situation differs from that of others. (p. 26)

Hunt and Larson (1975), in referring to influences of perceptions on leadership behavior, indicate that the difference a leader's style makes within an organization may not be so much in terms of what he does but in terms of how his leadership behavior is perceived by others.

Fiedler (1968), in his theory of leadership effectiveness, postulates that leadership behavior is essentially a relationship involving power and influence. A number of studies based on Fiedler's situational theory of leadership concluded that the most important single determinant of a leader's effectiveness was his relations with group members.

In a comprehensive review of the leadership literature on educational administration, Lucio and McNeil (1969) report that research investigating supervisory behavior by the school principal reveals that morale is often linked to perceived leadership behavior. The importance of morale as a variable which contributes to the accomplishment of school goals was postulated by Getzels, Lipham and Campbell (1968). In their theoretical formulation morale was described as "a willingness to be involved in the school and its work" (p. 129). Many researchers have pointed to the importance of leadership and the impact that it has on morale in both industrial and educational settings (Bidwell, 1955; Korman, 1966; Davis, 1963; Redefor, 1959).

Although the need for high morale in organizing effective work groups has been widely discussed in the literature, there have been few attempts to define the concept in any systematic way. Morale is conceived by some as a feeling of belongingness in a group or identification with the goals of the group. Argyris (1957) points out that a basic incongruency exists between the needs of the mature personality and the needs of the formal organization. In his view, teachers will experience frustration when they have minimal influence over their jobs and working conditions. The research of Getzels and his associates (1955) resulted in the development of an organizational theory based upon the maintenance of a balance between the needs of the organization and the needs of its employees. In their theoretical model the leader was seen as the mediator between the two opposing forces.

Stogdill (1961) describes morale as the degree of freedom from restraint exhibited by a group working toward a goal. The motivation of the individual and the group provides the potential for morale. Stogdill, however, holds that the level of morale will be dependent upon both the strength of the motivation and the freedom to act.

In behavioral science research a relationship between the perceived leadership behavior of supervisors and the morale of employees is posited (Likert, 1961; Stogdill, 1974). Likert (1961) asserts that the leadership can support the needs of workers. This principle has been called a "principle of supportive relationships" and holds that the "leadership and other processes of the organization can be such as to insure a maximum probability that in all interactions and all relationships with the organization, each member will, in light of his background, values, and expectations, view the experience as supportive and

one which builds and maintains his sense of personal worth and importance" (p. 121).

In spite of the emphasis on morale in recent studies in both industrial and educational settings, many writers hold that a definitive link between morale and resulting productivity has yet to be proven (Viteles, 1953; Kahn, 1960; Korman, 1966). In discussing this issue Bergeth (1970) states that it is usually assumed that high teacher morale is good for education. This notion has been subjected to very little empirical verification and there is a dearth of objective research designed to determine if morale is related to effectiveness in school environments. An early study by Anderson (1953), however, attempted to address the issue. Anderson found that significant differences existed between the achievement of students in schools high in teacher morale and those schools with low teacher morale.

While the Anderson study lends some substance to the widely held view that high morale is a necessary prerequisite to productive schools, such research is rare. There is a paucity of studies that systematically focus on the interrelationships of leadership behavior, morale and effectiveness. Nonetheless, there is evidence that the behavior of the leader in the school setting does influence teacher attitudes.

In summary, leadership behavior is generally said to be a factor in determining the morale of teachers. There is some limited evidence that the morale of teachers may be related to the achievement of pupils and hence, school productivity. While the existing body of literature appears to support the notion that teacher perceptions of the leadership behavior of their principals is related to their morale, significantly less evidence exists to justify the idea that the resulting state of

teacher morale is related to various measures of school effectiveness.

### Statement of the Purpose

The purpose of the present study was to investigate the theoretical relationships among teacher perceptions of the leadership behavior of their principals, the output of their schools, and their expressions of morale. The study was designed specifically to answer the following questions:

Do teacher perceptions of leader behavior relate to teacher morale?

Do teacher perceptions of the leader behavior of their principals relate to their perceptions of the organizational output of their schools?

Do teacher perceptions of the organizational output of their schools serve to moderate the relationship between perceived leader behavior and morale?

Are there significant differences in the perceptions of the leadership behavior of principals by lay and religious teacher groups?

### Significance of the Study

The crisis in education today is nowhere more critical than in the Catholic schools (Huffman, 1974). Of approximately six million elementary and secondary pupils enrolled in more than 18,000 nonpublic schools across the nation, over 90 percent are in schools operated by the Roman Catholic Church. More than 13 percent of the nation's elementary students attend Catholic schools with large concentrations in the nation's largest metropolitan areas (Farquhar, 1968).

Historically, lay teachers made up a majority of Catholic school

faculties. Huffman (1974) asserts that lay teachers in the Catholic schools are seeking to assert their strength in influencing school policies. She concludes that if the Catholic schools are to survive as a viable alternative to the nation's system of public education, the system will have to be revolutionized by the growing unionization of lay teachers in nonpublic schools.

Koob and Shaw (1970) point to what they perceive to be a truly appalling lack of objective research about Catholic education. They hold that the size and the composition of the Catholic school teaching force are changing dramatically. They point to the growth in lay teachers and stress that this growth is creating new leadership challenges for Catholic secondary school principals.

The militancy of teachers in Catholic schools is not limited to lay teachers. A recent sociological trend impacting on the school environment is what has been called a "new breed" of religious brothers and sisters. These people are very different from their predecessors according to Koob and Shaw. Automatic obedience and docility are now being questioned as never before.

Plude (1974) concludes that Catholic education suffers from a leadership crisis. A call for change in the leadership of Catholic schools is recommended: "With proper planning and execution, Catholic education in America can be strengthened and deepened as a result of having to adjust to new times and situations. The danger is that change will come about without adequate preparation and coordination" (p. 119).

In light of this brief outline of the state of Catholic education in the United States today, the present study was constructed to determine the status of leadership in the secondary schools of the Diocese

of Richmond with a view of learning how knowledge of organizational life can be applied to the problems in Catholic secondary education.

### Theoretical Background

The theoretical background for the present study was drawn primarily from research and literature in the behavioral sciences as applied to industrial, military and educational settings. From the theory base and selected research findings, four hypothesized relationships were formulated for empirical investigation.

The specific leadership theory which forms the basis for the present study was developed as a result of the Ohio State University Leadership Studies (Stogdill & Coons, 1957). Beginning in 1945, the Ohio State University researchers attempted to identify various dimensions of leader behavior. Up until that time the literature on leadership had focused on the so-called "trait theories." Theorists were generally unhappy with research up to this point because they found that the trait theory did not help to explain what was happening in group situations. They also found that the traits demanded of a leader varied from one situation to another (Fiedler, 1967). With this background on trait theory in mind the Ohio State researchers decided to study the observable behaviors rather than the traits of leaders. This emphasis led to the development of an instrument by which leadership behavior could be measured. The Leader Behavior Description Questionnaire, or LBDQ for short, was prepared by Hemphill and others in 1957. A list of approximately 1,800 items describing different aspects of leader behavior was factor analyzed with the result that two factors identified as "consideration" and "initiating structure" were isolated as explaining the great majority of variance in observed leader behavior. Initiating

structure refers to the leader's behavior in delineating the relationship between himself and members of his work group and in endeavoring to establish well-defined patterns of organization, channels of communication and methods of procedure. Consideration refers to the behavior indicative of friendship, mutual trust, respect and warmth in the relationship between the leader and members of his staff. Sergiovanni and Carver (1973), in discussing the Ohio State leadership theory, assert that the two leadership styles are not mutually exclusive:

Perhaps the most important, and often overlooked point about initiating structure and consideration behaviors is that they are not arranged on a continuum. They are two separate dimensions which may range from high to low in any one individual. (p. 203)

The two types of leadership behavior have been plotted on horizontal and vertical axes to form four leadership quadrants based on various combinations of each dimension. The four leadership quadrants formed include: high consideration/low initiating structure; high consideration/high initiating structure; low consideration/high initiating structure; and low consideration/low initiating structure. The dimensions are similar to other dual-factor theories posited by Blake and Mouton (1962), McGregor (1960), Katz and Kahn (1960), and Fiedler (1961).

The consensus of empirical research, as summarized by Stogdill (1974), is that an individual who exhibits both dimensions of behavior and has high scores on both the consideration and initiating structure dimensions (e.g., high consideration/high initiating structure) is the most effective both in terms of meeting the needs of the workgroup and in achieving organizational purposes (Shartle, 1956; Stogdill, 1974).

Empirical research has been performed to test the validity of the

Ohio State leadership theory in industrial, military, and educational environments. Stogdill, after reviewing the available research in educational settings, concludes that when teachers and principals are described as exhibiting high-consideration/high initiating structure leadership behavior, their pupils tend to do better on tests of school achievement.

In a more recent analysis, Miller (1976) cites research which points to a relationship between perceptions of leadership by school principals and school productivity or output. He also concludes, based on his review of the research, that the high-consideration/high initiating structure leadership behavior is most often related to achievement of students. Further evidence is provided by Keeler and Andrews (1963) who found that the leadership behavior of secondary school principals was related to objective measures of school productivity.

In addition to these studies showing that leaders high in both consideration and initiating structure are most effective in terms of school performance, Weed, Mitchell and Moffitt (1976) state that "the leader high in human relations and task orientation is liked best by followers" (p. 65).

Of the four leadership styles depicted in the Ohio State leadership quadrants, therefore, "high-consideration/high initiating structure" is said to be superior in terms of both employee morale and performance.

In the present study one of the hypotheses predicted that teachers who perceive their principals' leadership behavior as "high consideration/high initiating structure," would have the highest mean morale scores as suggested by the research cited by Weed, Mitchell and Moffitt (1976). For the purpose of the present study, the notion that "high-consideration/



high initiating structure" behavior is related to organizational effectiveness was tested by formulating a hypothesis which predicts that teachers perceiving their principals' behavior as "high consideration/high initiating structure" will have the highest mean assessments of organizational output or effectiveness.

Much research conducted on leadership behavior and its effect on morale and effectiveness has been criticized by Korman (1966). He states that researchers have made little attempt in the past to conceptualize situational variables which might act to moderate the generally agreed upon relationship between leader behavior and morale. He points out that researchers have almost always followed a two-variable research design which consists of simply correlating the independent variable with the dependent variable with little appreciation of possible moderating variables. The present study sought to respond to Korman's advice (1966) and postulated that a possible moderator of the relationship between perceived leader behavior and teacher morale may be the teachers' assessments of the output of their schools. Accordingly, a hypothesis was generated for investigation which predicted that there would be a significant relationship between teachers' perceptions of leadership behavior and morale while controlling for the effect of teacher assessment of organizational output.

Closely aligned with theory on the effects of leader behavior on subordinates is the tendency for leadership behavior to be perceived differently by various groups in the population served by that leader. Schuttenberg (1972) found that within organizations, members of different sub-groups frequently perceive the behavior of their leaders in significantly different ways. A number of studies (Halpin, 1965;

Fleming, 1974) have established that sub-groups within an institution perceive behavior differently. Fleming tested this proposition using a sample of religious and lay teachers in the Roman Catholic Arch-dioceses of Chicago and Detroit and found that the teacher's lay and religious status was a variable which accounted for significant perceptual differences.

Halpin (1965) studied the leadership behavior of school superintendents as perceived by staff and school board members. It was found that while both board members and staff members agreed among themselves as to the behavior of their superintendents, the two groups differed significantly from each other as to their perceptions. Such differences in perceptions of leader behavior from the various constituencies comprising the school population is important to the principal who seeks to understand the effects of his or her behavior on the staff. One of the hypotheses of the present study was used to replicate Fleming's finding and predicted there would be significant differences in the perceptions of principal leader behavior as described by the religious and lay teachers of the secondary schools of the Diocese of Richmond.

In summary, this preliminary review of theory and empirical research indicates that there is a relationship between perceived leader behavior and teacher morale. While perceptions may not be totally accurate, they seem to influence morale. The Ohio State leadership theory posits two major factors in leadership behavior called "consideration" and "initiating structure" and subsequent research based on the Ohio State theory suggests that the leader perceived as exhibiting both high consideration and high initiating structure behavior is most

effective in terms of morale and productivity. Evidence was also cited which suggests that subgroups within an organization frequently perceive leadership behavior in different ways and this can affect morale.

### Definitions, Constructs and Hypotheses

#### Definitions

The term "leader" was used throughout the study to refer to a person who serves as the principal of a Roman Catholic secondary school within the Diocese of Richmond, Virginia. The term "teacher" used throughout the study refers to religious and lay instructional personnel assigned to the secondary schools of the Diocese of Richmond.

Leader Behavior. Leader behavior, in the context of the present study, refers to the perceived behavior of the school principal on the consideration and initiating structure dimensions of the Leader Behavior Description Questionnaire (LBDQ).

Consideration. "Consideration" is a leadership behavior which refers to "behavior indicative of friendship, mutual trust, respect and warmth in the relationship between the leader and members of his group." (Halpin, 1957, p. 1)

Initiating Structure. "Initiating structure" is a leadership style which refers to the leader's behavior in "delineating the relationship between himself and the members of his group, and in endeavoring to establish well-defined patterns of organization, channels of communication, and ways of getting the job done." (Halpin, 1957, p. 1)

Morale. For the purpose of the present study, morale is defined as "an effect related to the successful interaction among individual needs, incentives, and organizational goals. It refers to

the professional interest a person displays toward the achievement of individual and group goals in a given job situation." (Bentley & Rempel, 1970, p. 2)

Organization. As used in this study, "a deliberately planned and structured arrangement of interactions among people and various economic, material and technical resources designed to cooperatively accomplish a consciously determined goal or outcome." (Schuttenberg, 1972, p. 6)

Organizational Output. The term "organizational output" means the results, outcomes, or consequences of the work processes and activities of an organization. (Schuttenberg, 1972, p. 8)

### Constructs

The variables investigated empirically in this study were defined operationally as constructs to be used in the testing of empirical hypotheses.

Leader Behavior. An interally measured independent variable derived by summing the values of thirty items addressing consideration and initiating structure behavioral dimensions of the Leader Behavior Description Questionnaire.

Consideration. An interally measured independent variable derived by summing the values of fifteen items addressing consideration behavior in the Leader Behavior Description Questionnaire.

Initiating Structure. An interally measured dependent variable derived by summing the values of fifteen items measuring initiating structure behavior in the Leader Behavior Description Questionnaire.

The four behavioral styles perceived by teachers were constructed

using the categories suggested by Halpin (1959), Shartle (1956), and Stogdill (1974). The four styles depicted in the leadership quadrants of the Ohio State leadership studies were isolated for empirical investigation and identified as: "high-consideration/high-initiating structure;" "high-consideration/low-initiating structure;" "low-consideration/high-initiating structure;" and "low-consideration/low-initiating structure." These behavioral styles were defined operationally as follows:

High Consideration/High Initiating Structure. A nominally measured independent variable derived by a high score (above the median) on both the "consideration" and "initiating structure" dimensions of the LBDQ. This means that the leader was perceived by teachers as placing emphasis on gaining friendship, mutual trust, and respect in relations with members of the group as well as establishing well defined patterns of organization and channels of communication.

High Consideration/Low Initiating Structure. A nominally measured independent variable derived from a high score (above the median) on the "consideration" dimension of the LBDQ and a low score (below the median) on the "initiating structure" dimension of the LBDQ. This means that the leader was perceived as placing emphasis on gaining friendship, mutual trust, and respect in relations with members of the group while placing less emphasis on establishing well-defined patterns of organization and channels of communication.

Low Consideration/High Initiating Structure. A nominally measured independent variable derived from a low score (below the median) on the "consideration" dimension of the LBDQ and a high score

(above the median) on the "initiating structure" dimension of the LBDQ. This means that the leader was perceived as placing an emphasis on establishing well-defined patterns of organization and channels of communication while placing less emphasis on gaining friendship, mutual trust, and respect in relations with members of the group.

Low Consideration/Low Initiating Structure. A nominally measured independent variable derived from a low score on both the "consideration" and "initiating structure" dimensions of the LBDQ. This means that the leader was perceived as placing emphasis on neither establishing well-defined patterns of organization nor gaining friendship, mutual trust and respect of members of the group.

Teacher Morale. An interally measured dependent variable derived from summing the values of the ten subtests of the Purdue Teacher Opinionnaire.

Organizational Output. An interally measured dependent variable derived by summing the scores of the four dimensions and ten subcategories of the Organizational Questionnaire.

Status. A dichotomous nominally measured independent variable derived by dividing the teachers into two categories based on their membership of either a religious order of the Roman Catholic Church or lay status.

### Hypotheses

The hypothesized relationships among perceived leader behavior, assessments of organizational output and expressed morale were formulated from leadership theories and empirical research previously cited in this

chapter. The hypotheses tested in this study were as follow:

Hypothesis 1 -- Teachers who perceive their principals as exhibiting behavior which belongs to the "high consideration/high initiating structure" quadrant of the Ohio State leadership quadrants will have the highest mean morale scores of the four groups; namely, "low consideration/low initiating structure"; "low consideration/high initiating structure"; "high consideration/low initiating structure"; and "high consideration/high initiating structure."

Hypothesis 2 -- The highest mean assessments of organizational output will come from teachers who perceive their leader's behavior as "high consideration/high initiating structure."

Hypothesis 3 -- There will be a significant coefficient of correlation between teacher perceptions of the leadership behavior of their principals and their morale while controlling for the effect of teacher assessment of organizational output.

Hypothesis 4 -- There will be a statistically significant difference in the perceptions of leader behavior of the principal by religious and lay teacher groups comprising the Catholic secondary school teacher population.

#### Organization of Study

A review of the literature and research relevant to the purposes and hypotheses of the study will be presented in Chapter 2. The research design, statistical treatment of data, data collection procedures and instrumentation for the study will be discussed in Chapter 3. An analysis and interpretation of data will be presented in Chapter 4 and a discussion of the findings along with implications for educational practitioners will be discussed in Chapter 5.

## Chapter 2

### Review of Related Literature and Research

A review of literature and research related to the purpose and hypotheses of the present study will be presented in this chapter. The review is divided into two sections with concomitant summaries.

#### Section A

##### Review of Related Literature

The following section on the review of related literature is subdivided into subsections dealing with: (1) the evolution of leadership theory; (2) the importance of morale in educational institutions; and (3) a review of systems thinking and its application in educational institutions.

##### The Evolution of Leadership Theory

This subsection will present a discussion of three major schools of leadership: (1) trait theory; (2) behavioral leadership theory; and (3) situational theories of leadership.

##### Trait Theory

Early studies of leadership behavior focused on discussions of the traits leaders possessed which were said to distinguish them from their followers. Trait theory holds that there are a limited number of definable characteristics of successful leaders. These studies assumed that humans could be divided into two groups: leaders and followers. Consequently, leaders would have to possess certain traits or qualities not possessed by others.



Numerous writers have attempted to correlate traits with various objective measures of leadership. In a survey of research on the trait theory of leadership Stogdill (1974) reports on numerous studies linking selected traits such as intelligence, popularity, height, weight, and sociability with measures of leadership.

A limitation in trait theory suggested by Speiss (1975) is that the traits deemed essential for effective leadership frequently are selected arbitrarily by those following the trait orientation to leadership. Thus, these essential traits were frequently no more than someone's opinion of which attributes leaders should possess.

As early as 1948 Barnard outlined what he called "active qualities of leaders": vitality and endurance; decisiveness; persuasiveness; responsibility; and intellectual capacity. (p. 100)

There is a parallel between the so-called "active qualities" of leaders cited by Barnard and "special abilities" discussed by Fayol (1949). Fayol cites general and special education as being traits necessary for successful leadership. He asserts that possession of these special abilities becomes more critical as one proceeds upwards along the organizational ladder (p. 9).

Very few of the numerous lists of leadership traits have many items in common. In an extensive examination of the research focusing on the trait leadership theory it was found that only about 5 percent of the traits listed were common to four or more investigations. The conclusion is that despite extensive study, researchers have been unable to develop any meaningful list of attributes for leadership.

Emphasis on the trait theory of leadership and subsequent research which brought its validity into doubt eventually led to the evolution of

a leadership theory focusing on the behavioral patterns of leaders.

### Behavioral Leadership Theories

A major body of leadership theory can be classified as behavioral in that it concentrates on the observed behavior of leaders. These theories focus upon an analysis of what the leader does and how he behaves in carrying out his leadership functions rather than on traits possessed by leaders.

Wofford (1971) states in his summary of leadership research that over the last twenty years studies have tended to focus on two-factor leadership behavioral styles variously referred to as:

1. Employee-centered or job-centered (Likert, 1964).
2. People-oriented or production-oriented (Blake & Mouton, 1964).
3. Democratic or autocratic (White & Lippitt, 1960).
4. Consideration and initiating structure (Hemphill, Stogdill, Coons, Halpin & Fleishman, 1957).

As early as the 1930's two dimensions of leadership behavior were described by Barnard (1938) as "task-orientation" and "people-orientation". Barnard describes the function of the executive as securing the persistence and survival of individuals that have united into a group for some purpose. The persistence of the group toward the objective was described by Barnard as depending upon two conditions: its efficiency and its effectiveness. Barnard defines "effectiveness" as the accomplishment of the group purpose which is social and non-personal in character. By "efficiency" Barnard refers to the satisfaction of individual motives and this is personal in character. Thus, while not using the modern terms "concern for task" and "concern for people", Barnard expressed the same concepts in his early writings.

The Ohio State leadership studies were organized in 1948 by Shartle and his associates. At that time nothing existed in the way of satisfactory leadership theory. Research prior to World War II had sought to identify the differentiating traits of leaders, but severe limitations in the testing of the trait theory led to its eventual abandonment. Since the personality trait theory had proved fruitless, it was decided that an attempt should be made to systematically study the observed behavior of leaders. Hemphill (1949) and his associates developed a list of approximately 1800 items describing different aspects of leadership behavior. These items were used to develop the first form of the Leader Behavior Description Questionnaire (LBDQ). Several factor analytic studies (Halpin & Winer, 1957) of item inter-correlations produced two leadership factors identified as "consideration" and "initiating structure".

The LBDQ reflected the findings of factor analytic studies and dealt with two behavioral dimensions--the institutional goals and the satisfaction of the people involved. The LBDQ, with several revisions, was used by Halpin, Stogdill, Winer and others (1957) in studies of aircraft commanders and educational administrators. The two behavioral styles developed as a result of the Ohio State studies seem to indicate separate and distinct dimensions of behavior. The two dimensions were called "initiating structure" and "consideration". Initiating structure refers to the "leader's behavior in delineating the relationship between himself and the members of the work group and in endeavoring to establish well-defined patterns of communication and methods of procedure." Consideration refers to "behavior indicative of friendship, mutual trust, respect and warmth in the relationship between the leader

and the members of the staff" (Stogdill, 1974, p. 128).

The two behavioral patterns which comprise the Ohio State leadership theory are not mutually exclusive and a given leader may demonstrate behavior from low to high in either dimension. During the Ohio State studies two dimensions of leadership behavior were plotted on separate axes forming four leadership quadrants previously described in Chapter 1 as: (1) high consideration/high initiating structure; (2) high consideration/low initiating structure; (3) low consideration/high initiating structure; and (4) low consideration/low initiating structure. A summary of the empirical research focusing on the Ohio State Leadership theory will be presented in Section B of this chapter.

At about the same time that researchers at Ohio State were constructing the LBDQ a similar program was being instituted at the University of Michigan's Survey Research Center. This line of research led to the identification of two dimensions of leadership behavior which were called "employee orientation" and "production orientation". Likert (1964) suggests that leadership is a relative process in that the leader must take into account the expectations, values and interpersonal competencies of those with whom he interacts. Likert holds that the leader must behave in a manner which will be perceived by followers as supportive of their efforts and of their sense of personal worth. It is apparent from Stogdill's description of Likert's theory that the theory is similar to the Ohio State theory and other so-called dual-factor leadership theories (Stogdill, 1974, p. 128).

Blake and Mouton (1964) developed a leadership theory centering on the relationship between two dimensions: people and mission. The leader's job, according to Blake and Mouton, is to accomplish the work

of the organization through the efforts of people. Blake and Mouton plotted concern for performance on a horizontal axis and concern for people on a vertical axis to form what has been called the "managerial grid".

Theory in educational administration has followed the two-dimension paradigm so prevalent in the industrial and military leadership literature. Getzels, Lipham and Campbell (1968) discuss a social systems model of organizational functioning. This social systems model is similar to early propositions formulated by Barnard and describes administration as a social process in which the result is viewed as interactive of the nomothetic (institutional) and idiographic (personal) dimensions of organizational behavior. The nomothetic dimension of activity in a social system is described as "the institution, with certain roles and expectations, that will fulfill the goals of the system" (p. 56). The individual personality and needs-disposition elements of the social system comprise the idiographic or personal dimension.

Rogers (1969) posits a theory similar to the social systems model. He asserts that the key elements of any system need to be identified and linked together into some unified whole. This will set the stage for conditions which will contribute to the individuals directly associating and relating the goals of the organization to their own personal goals. Rogers suggests that an institution's success depends upon the compatibility of organizational and personal goals.

Tannenbaum and Schmidt (1958) depict leadership as belonging to a continuum with "boss-centered" leadership at one extreme and "subordinate-centered" leadership at the other extreme. The continuum is based

on the degree to which authority is used by the manager to the degree of freedom allowed subordinates in carrying out their functions.

As can be seen from the previous discussion, behavioral theories of leadership have typically focused on behavioral styles which can generally be subsumed under two broad categories previously described as "concern for people" and "concern for production". The framework for situational theories of leadership can be traced back to Barnard (1948) who held that leadership depends on at least three factors: (1) the individual; (2) the followers; and (3) the environmental conditions embracing both the leader and his subordinates.

#### Situational Leadership Theories

Gates, Blanchard and Hersey (1976) hold the view that the situational theory grew out of earlier models that were based on the task and relationship behavior of leaders. As indicated earlier, the Ohio State leadership theory has also been described in terms of four separate and distinct leadership styles. The four styles described by Gates, Blanchard and Hersey include: (1) low task/high relationship; (2) low task/low relationship; (3) high task/low relationship; and (4) high task/high relationship. Situational leadership theory is based upon an interplay among (1) the amount of direction (task behavior) a leader gives; (2) the amount of socio-emotional support (relationship behavior); and (3) the maturity level that the followers exhibit on any given task. According to this specific situational theory, as the level of maturity of their followers continues to increase in terms of accomplishing a specific task, leaders should begin to reduce their task behavior and increase their relationship behavior. This behavior on the part of the leader should continue until the individual or group reaches a moderate

level of maturity. As the followers begin to move into above average maturity, it becomes appropriate for leaders to decrease not only task behavior but relationship behavior as well. At this point the theory suggests that the group members are mature both in terms of the task and relationship aspects of organizational functioning.

Further evidence of a need to take the situation into account when studying the relationship between leadership style and organizational effectiveness has been suggested by Kerr and associates (1974). They conclude that a variety of situational factors influence which style of leadership is appropriate. Situational factors identified as being related include job pressure, intrinsic job satisfaction, subordinate's need for information, and leaders' consideration behavior.

One of the most widely reported contributors to the literature on situational leadership theory is Fiedler (1967). Fiedler's "contingency theory of leadership" postulates two major styles of leadership. One of these is a leadership style which is primarily task-oriented and the other is primarily oriented toward achieving effective interpersonal relations. It can be seen that Fiedler's theory is similar to other dual factor theories suggested by Stogdill and Coons (1957), Blake and Mouton (1964), and Likert (1961). The major difference in Fiedler's theory is that he takes the situation into account in his research. His theory predicts that a task-oriented style will be maximally effective in highly favorable and unfavorable situations while a relationship style will be most effective in situations of intermediate favorableness.

A recent theory developed by House (1973) postulates a "path-goal" approach to leadership. This theory attempts to reconcile the conflicting

results of previous studies on the two major leadership dimensions. House's theory is based upon a path-goal hypothesis formulated by Georgopoulos, Mahoney and Jones (1957) which advances Vroom's expectancy theory of motivation. The central concept of the theory is that the force on an individual to engage in a specific behavior is a function of (1) his expectations that his behavior will result in a specific outcome; and (2) the sum of the satisfactions or valences that the individual derives from the outcome. House's theory builds on the path-goal hypothesis and suggests that an individual chooses the behaviors he engages in on the basis of (1) the satisfactions he perceives to be related to the outcomes of the behavior under consideration; and (2) his subjective estimate of the probability that this behavior will result in the outcomes.

According to Gramenz, "the path-goal theory of leadership has proven useful in reconciling some of the conflicting results of empirical studies concerned with leader initiating structure, consideration, subordinate satisfaction, and motivation" (1974, p. 31).

This subsection has presented a discussion of some of the major contributors to the literature which constitutes the evolutionary body of leadership theory. The next subsection will present a discussion of the growth in the attention devoted to morale in industrial and educational settings.

#### The Importance of Morale in Industry and Education

The concept of teacher morale has been the subject of much discussion and research over the last twenty years. Since morale is difficult to define, many researchers have begun their investigations with a



variety of assumptions. Current investigations reported in the literature seek to relate motivational processes to organizational factors in the formation of morale. This approach assumes that teachers have inherent and acquired needs and that many of these needs can be gratified by specific aspects of the teacher's work environment. This notion is based on Maslow's hierarchy of human needs. For research purposes, morale has often been defined according to the conceptual inclination of the researcher conducting the study.

A review of relevant literature reveals that morale has been variously described as effective personal adjustment (Getzels, Campbell, & Lipham, 1969); ego-involvement in one's job (Herzberg, 1968); or a we-feeling (Viteles, 1953). Coughlan (1970) chose to use the following operational definition of morale: ". . . the extent to which an individual's needs are satisfied and the extent to which the individual perceives that satisfaction as stemming from his total job situation" (p. 232).

Traditionally, morale has been treated as a uni-dimensional concept. This viewpoint assumes that any positive work-related factor offering satisfaction to a worker can create dissatisfaction in its absence. As a result, the uni-dimensional theory requires only an overall index of morale or job satisfaction. Herzberg's (1959) two-factor theory of job satisfaction was the first significant step toward a multi-dimensional description of job attitudes at the professional level.

Studies of industrial morale conducted by the Survey Research Center of the University of Michigan demonstrated that morale, as conventionally measured, consists of at least four factorially separate dimensions: (1) intrinsic job satisfaction; (2) satisfaction with the

employing company; (3) liking for the supervisor; and (4) satisfaction with one's mobility in the company. This industrial multi-dimensional concept of morale corresponds to Coughlan and Froemel's hypothesis that there is a "dynamic complexity in the structure of morale" (Coughlan, 1971, p. 1).

#### Role of Demographic Variables

The isolation of multiple factors comprising teacher morale has led investigators to the study of the role demographic variables play in determining teacher attitudes. Past research has often focused upon the demographic factors which are believed to play some role in determining specific attitudes. The literature has suggested the following variables as worthy of attention: (1) sex; (2) age; (3) level of formal education; and (4) experience (Peterson, 1971, p. 9).

A two-year study by Bentley and Rempel (1967) attempted to assess the effects of selected demographic variables upon the morale of teachers. The researchers found that sex, age, education, and teaching experience all explained differences in the morale of teachers sampled in high schools of Oregon and Indiana.

An investigation conducted by Bergeth (1970) in North Dakota resulted in the finding that significant predictors of teacher morale were: (1) educational preparation; (2) years of teaching experience; and (3) age.

To investigate the effects of demographic variables on morale in industrial settings, Jury, Weitzel, Davis and Pinto (1971) used the responses of 1139 employees in six companies to 28 different indexes of satisfaction to perform a factor analysis. The study concluded that demographic characteristics reflected differing perceptions by

employees of organizational-related variables but not in the perceptions of individual-related variables for job satisfaction.

### The Relationship Between Morale and Productivity

As was indicated in Chapter 1, numerous writers (Viteles, 1953; Kahn, 1960; Korman, 1966) hold that a definitive link between morale and productivity has yet to be proven. For many years the supposed existence of a cause-effect relationship between job satisfaction and job performance was the principal argument used by social scientists to convince employers to institute changes beneficial to their employees. Some early studies seem to support this argument (Quinn, Staines, & McCullough, 1974). However, a damper was put on efforts to show that job satisfaction results in improved performance by two influential reviews of research. One researcher reviewed 26 pre-1957 studies and concluded that there was a small but inconsistent relationship between job performance and satisfaction. Another major review of research (Vroom, 1964) indicated that the association between job satisfaction and performance is not very great.

Vroom (1964) suggests that predicting a relationship between job satisfaction and performance is a complex problem. There are many factors which affect the direction of the relationship in any given situation. Correlations between these two variables are affected by any effects of satisfaction on performance, any effects of performance on satisfaction, and by uncontrolled variables.

Bentley and Rempel (1963) state that it is generally assumed that teacher morale is one important factor in determining educational outcomes. School authorities have demonstrated concern about teacher welfare because of the assumed importance attached to the influence of

teacher morale on student attitudes and subsequent learning. They hold that the felt needs of teachers are intimately related to the felt needs of students.

The issue of teacher morale and its impact on learning is far from settled according to Bidwell's analysis. He indicates that there is no clear experimental evidence to verify the existence of a relationship between teacher satisfaction and teacher effectiveness (Bidwell, 1956, p. 285).

Kiesling (1975) suggests that the problem of determining appropriate productivity criteria is of significant relevance in education. Rising concern over the production of the public schools has resulted in increasing research directed toward finding ways to improve the effectiveness of elementary and secondary education. According to Kiesling, most research in this area has focused on the relationship between productivity and four groups of variables: (1) teacher characteristics; (2) the organization of local school districts; (3) procedures used to deliver local school services; and (4) pupil characteristics (Kiesling, 1975).

Riles (1975) asserts that it is inevitable that more school boards will adopt a cost-accounting attitude toward education but warns that schools "aren't factories, and using an industrial model for accountability doesn't work" (Riles, 1975, p. 3). Most cost-effectiveness analyses in education have attempted to relate student, school and societal factors to the more limited outcomes of student achievement as measured by the various standardized tests. This approach has not stemmed from any effort to denigrate other aspects of school output but because intellectual achievement as demonstrated on standardized tests is the best

measure available at the present time (Cohn & Millman, 1974).

In discussing the research on productivity in education Cohn and Millman assert that school output surpasses student achievement on tests of cognitive ability:

It is important to remember that most studies have dealt with a singular aspect of educational output--tested cognitive achievement. Since few would argue that the educational process benefits the individual and society only in this way, increased efforts must be directed toward the task of identifying and measuring educational outputs and the factors which contribute to them. (p. 20)

Follettie (1972) argues that the productivity of labor in education is low and that a primary need is to raise appreciably the productivity of educational labor. He cites studies in the British secondary schools which demonstrate that while inputs into education have risen steadily since 1960, there has not been an increase in the quality of education.

Until very recently, Cohn and Millman (1974) state that the schools have not undergone the type of critical scrutiny familiar to profit-making businesses. Education was said to be vastly different from business institutions; and therefore, modern principles of scientific management could not be made to apply to educational institutions. Willingness to examine the effectiveness of educational institutions in terms of the consumption of resources vis-a-vis outcomes is due to the acceptance of a systems perspective of education.

#### The Systems Approach and Education

Terms such as "systems approach" and "systems analysis" have

appeared more frequently in the educational literature in recent years (Hayman, 1974). Many volumes have been published which treat the systems approach to the solution of problems at all levels of government and industry. Only recently, according to Ciampa (1975), have systems concepts been formalized within the realm of education.

A system can be defined as a "set of objects together with relationships between objects and their attributes" (Benathy, 1968, p. 12). A comprehensive systems definition in the context of education is presented by Benathy (1968):

Systems are assemblages of parts that are designed and built by man into organized wholes for the attainment of specific purposes. The purpose of a system is realized through processes in which the interacting components engage in order to produce a predetermined output. Purpose determines the process required, and the process will imply the kinds of components that will make up the system. A system receives its purpose, its resources, and its constraints from a suprasystem. In order to maintain itself, a system has to produce an output that satisfies the suprasystem. (p. 12)

The systems approach to problem solving has evolved from a general systems framework which attempts to solve problems through four general stages:

1. A statement of objectives.
2. An analysis of the complex network of interactions in the relevant system or a system analysis.
3. An outline of alternative solutions to the problem.
4. A determination of which alternative provides the best solution at maximum efficiency. (Hayman, 1974, p. 494)

The systems approach appears logical and has been described as nothing more than common sense. Silvern (1969) suggests that the systems approach is not just common sense but "a discipline, complete with theoretical underpinnings and a developed methodology" (Hayman, 1974, p. 495).

An extension of systems analysis is a highly specialized science described in the literature as "output analysis". Optner (1960), in speaking of systems design, suggests that the output of the system is the best indication as to whether it is achieving its goal. Criteria or measures of effectiveness supply a qualitative as well as quantitative yardstick to gauge the effectiveness of the output in satisfying the system requirement. He indicates that analysts should use several criteria to assess output.

Immegart and Pilecki (1969) have drawn upon earlier writings to develop an organizational output model. Basically, the Output Analysis Model sees the results of system action in four dimensions: (1) the effects the organization has on its environment, in terms of the goods, services and influences it produces; (2) the effects the organization has on its members, both individually and collectively, in terms of their personal development; (3) the effects the organization has on its own functioning in terms of the ability of the system to cope with changes in the environment in such a manner as to enhance its growth potential over time; and (4) the effects the organization has on the feedback process in terms of the amount and quality of the evaluative information it receives from within and without and the uses it makes of such information for organizational improvement. These four dimensions are designated as: (1) productivity; (2) integration potential;

(3) organizational health; and (4) evaluation; and they form the framework for organizational output analysis. The operational definitions of the four dimensions of the output model will be covered in detail in the next chapter in the section discussing the Organizational Questionnaire (OQ) by Schuttenberg (1972).

The application of systems concepts to organizations has been significant for at least two reasons. First, it has stressed that the various social and technical aspects of the organization are highly inter-related and that a change in one factor usually affects other parts of the organization. Second, it has stressed the inter-relationships between the organization and its environment (Dessler, 1976, p. 5).

The first section of this chapter has presented a discussion of the development of theories of leadership, the importance of morale in educational and industrial settings, and the growth in the application of systems concepts to educational institutions. The next section presents a summary of empirical research conducted in recent years that has focused on the Ohio State leadership theory and its validity in military, industrial, and educational institutions.

## Section B

### Review of Related Research on the Ohio State Leadership Theory

The following section on the review of related research is subdivided into subsections dealing with: (1) industrial/military studies investigating the effects of leadership on morale and productivity; (2) educational studies investigating the effects of leadership on morale and productivity; and (3) educational studies investigating differential perceptions of leadership behavior.



Industrial/Military Studies Investigating the Effects  
of Leadership on Morale and Productivity

Fleishman and Harris (1962) report on a study of 57 foremen in a manufacturing plant. They found that as the degree of consideration shown toward subordinates increased, the grievance rate decreased. The decrease was not a straight line linear relationship but was curvilinear in that the greatest amount of decrease in the grievance rate occurred as consideration increased from the lowest level to near the mid-point of consideration behavior. Employee turnover rates also revealed a pattern almost exactly like those of grievances when related to foreman consideration and structuring of the work environment.

In a separate investigation, Fleishman (1957) found that superior's ratings of supervisors' effectiveness are generally related to their structuring behavior in productive work groups, but the opposite is true in non-productive work groups. He concluded that absenteeism tends to be low in groups where supervisors are high in consideration behavior. Absenteeism was said to be high in production groups whose supervisors were described as high in initiating structure behavior.

Halpin (1957) attempted to determine the effects of initiating structure and consideration behavior of aircraft commanders on crew-member satisfaction and performance. In general, it was found that the ratings of the commander by his superiors were correlated significantly with the initiating structure scores and his ratings by his crew members were correlated highest with the consideration scores. Both dimensions were described as important components of a leader's behavior. Halpin concluded that the aircraft commander who is most likely to succeed is one who is above average on both the consideration and initiating structure dimensions.

In a similar study conducted by Fleishman (1957) the consideration and initiating structure scores of ROTC leaders were positively and significantly related to peer ratings of value to the group, but superiors' ratings were not related to either pattern of behavior.

Korman (1966) reviewed the research in which consideration and initiating structure scores of industrial supervisors were related to various measures of supervisory effectiveness and group performance. It was found that peer ratings of supervisory and group performance are not related to the supervisor's consideration and initiating structure behavior. However, evaluations by superiors and subordinates, as well as various objective criteria, tend to be related significantly to the supervisor's leader behavior as described by subordinates. These findings appear reasonable, according to Korman, in that a supervisor's peers in an industrial organization are not as well placed as are his superiors to evaluate his performance accurately.

Tucker (1973) investigated the relationships between selected leadership style measures and several employee performance variables within an individual company environment. Leadership style was measured at three organizational levels using instruments developed by Fleishman. A significant linear relationship was found between the initiating structure leadership adequacy measure and employee grievance rates.

Further evidence that leadership effectiveness is related to high consideration and initiating structure behavior was provided by Greene (1975), Swanson and Johnson (1975), and Halpin (1953). Possible directions of causality between leader behavior and subordinate satisfaction and performance were investigated over a period of three 1-month

intervals. The results of the study provided evidence that consideration is related to subordinate satisfaction and, conversely, that subordinate performance is related to both leader consideration and initiating structure across conditions. Green concluded, however, that when the relationship between initiating structure and subordinate performance was moderated by consideration, there was evidence of reciprocal causation. In particular, his study indicated how a leader might positively affect subordinate performance by increased emphasis on both consideration and initiating structure.

Swanson and Johnson (1975) report on a study of the relationships between descriptions of peers of leader behavior of 141 U. S. Air Force instructor pilots and the performance of those pilots on several dimensions of proficiency. Instructor pilots with the highest performance scores were those with high scores on both the initiating structure and consideration dimensions. Swanson and Johnson conclude that their study lends support to the hypothesis that leaders scoring high on both dimensions of leader behavior have higher performance scores than any other group of leaders, even when descriptions are obtained from peers.

Halpin (1953), in an early analysis of the leadership behavior of bomber crews during the Korean Conflict, attempted to relate leader behavior to crew performance and subsequent crew-member satisfaction. Using a sample of 89 crews flying in combat over Korea, Halpin obtained descriptions of leader behavior from the crews. In addition to these descriptions, ratings were obtained from superiors on overall crew effectiveness, technical competence, and conformity to administrative requirements. He also solicited ratings from crew members which yielded measures of crew confidence, friendship, cooperation, and morale.

Correlations between the crew member ratings and the consideration dimension were significant. The relationships between crew members' ratings and initiating structure were not as strong and evidence was discovered that crew members were more satisfied when their commanders engaged in more consideration-type behavior. Halpin's study demonstrated that, in general, it appears that groups with leaders who score high in both consideration and initiating structure dimensions are higher in overall effectiveness.

Several investigators have posited the view that situational factors affect the relationship between leader behavior and subordinate satisfaction and performance (Korman, 1966; Jacobs, 1970). Oaklander and Fleishman (1964) hypothesized a relationship between leader behavior and organizational stress in hospitals. It was hypothesized that a supervisor scoring high on the consideration dimension should have lower stress among his employees while those supervisors who scored high on the initiating structure dimension should have lower conflict between their own and other work groups. The relationships were found to be true only in hospitals of medium size. Jacobs (1970) concludes that these findings suggest that the effects of initiating structure behavior may be more dependent upon a given situation than the effects of consideration behavior.

The research on the Ohio State leadership theory has frequently been plagued by contradictory findings according to Fleishman and Harris (1971). They hold that the failure to consider the interaction effects of consideration and initiating structure may account for the inconsistent findings. When Cummins (1971) attempted to test this hypothesis using 133 foremen at a large manufacturing plant in the midwest,

he found that neither attitudes endorsing consideration nor worker ratings of their supervisors' consideration behavior served to moderate the relationship between initiating structure and productivity.

In summary, research studies conducted in industrial and military settings have often resulted in contradictory findings. There appears to be considerable evidence, however, that when reviewing the total research base it has been generally found that leaders exhibiting high consideration and initiating structure behaviors are most effective in promoting productivity and worker satisfaction. There is some limited evidence that situational factors may act as moderators of the relationship between leader behavior and subordinate satisfaction and performance.

#### Educational Studies Investigating the Effects of Leadership on Morale and Productivity

Studies in educational institutions have tended to focus on the relationship between leader behavior and teacher morale or leader behavior and various measures of school effectiveness. Little research has been done on the interrelationships among the three phenomena.

Laird (1974) investigated the relationship between perceived leader behavior of the principal and teacher morale in the vocational centers of Maryland. He found a significant correlation between the perceived leadership behavior of the principals and teacher morale. It should be pointed out that Laird's study did not attempt to determine the relationship of teacher morale to the effectiveness of the vocational centers of Maryland.

In a study by Petty and Lee (1975) the relationships between supervisory behavior and the job satisfaction of subordinates were

examined for four subgroups: (1) female supervisor, male subordinates; (2) male supervisor, female subordinates; (3) male supervisors and subordinates; and (4) female supervisors and subordinates. For all the groups in the study the subordinates with leaders who exhibited consideration behavior displayed greater satisfaction with their work. While most of the relationships between the supervisor's initiating structure and the subordinates' satisfaction were not significant, there was some tendency for male subordinates to have lower satisfaction with female supervisors who were seen as high in initiating structure behavior. Petty and Lee conclude that the consideration dimension of leadership is generally positively related with subordinate satisfaction and initiating structure is generally unrelated.

In a university environment Wagner (1974) investigated the relationship between leader consideration and initiating structure and a set of dependent variables including turnover, job satisfaction, and increases in departmental funding. Twenty-five administration departments at Michigan State University participated in the study. In each department the leadership behavior of the chairman was described by at least three subordinates. Data on file within the university administration were used to construct the dependent measures. In using the technique of canonical correlation Wagner found that both high consideration and high initiating structure were associated with job satisfaction, low turnover rates and departmental funding.

A study that related the leadership behavior of chief student personnel administrators to staff morale was reported by Bowling (1973). The study found that the leadership behavior of the chief student personnel administrator was positively related to the morale of the student affairs division and the job satisfaction of his department heads.

Empirical investigations which provide evidence of a relationship between leader behavior in the schools and productivity are rare. Greenfield and Andrews (1961) found that both consideration and initiating structure behavior by teachers as described by students were positively and significantly related to pupils' scores on province-wide examinations. A subsequent Canadian study by Keeler and Andrews (1963) reaffirmed the findings of the earlier Greenfield and Andrews study.

Hemphill (1957) reports the results of a study of leadership and administration in 22 departments in the liberal arts college of a moderately large university. His study was designed to explore the relationship between leader behavior of the departmental administrator and the reputation for being well-administered. Reputation for being well-administered was related to the leadership behavior of department chairmen as described by department members. Those department chairmen with the best reputations for good administration were described as being above average on both consideration and initiating structure.

In summary, empirical studies in educational settings which have investigated the effects of leadership behavior on morale and productivity have mixed results. There has generally been agreement that leadership behavior is related to staff morale but somewhat less evidence that leadership or morale results in improved school effectiveness.

#### Educational Studies Investigating Differential

##### Perceptions of Leadership Behavior

A phenomenon closely related to the preceding discussion of the effects of leader behavior on subordinate satisfaction is the tendency of perceptions of that leadership behavior to be seen differently by status groups within the school environment. Several researchers have

documented perceptual differences in assessing leadership behavior by the various status groups that comprise the organization. Yamada, in a 1973 study at Fordham University, sought to determine the differences in assessments of leadership behavior by principals, religious teachers, and lay teachers in Catholic parochial schools with and without negotiated contracts. There were significant differences between the perceptions expressed by principals and the perceptions of religious and lay teachers. Also, it was noted that there were no significant differences between the perceptions of the leadership behavior of the principals as described by religious and lay teachers.

A somewhat different conclusion was reached by Fleming (1973) regarding the effects of religious and lay status of teachers on their perceptions of principal leader behavior. She found that in the secondary schools of the Arch-dioceses of Chicago and Detroit there were significant differences between the religious and lay teacher perceptions of the leader behavior of their principals. Fleming concludes that the lay status of the secondary school teacher affected his perception of the leader behavior of the principal.

Additional evidence that the leader behavior of the principal is perceived differently by various subgroups within the school was provided by Cawley (1974) and Straub (1974). Using a sample of 63 elementary schools in Germany, Cawley found that in nine of the twelve subscales of the LBDQ-XII, there were significant differences between the leader behavior perceptions of teachers and central office staff members. Cawley recommends that principals be made aware of the importance of leader behavior perceptions as seen by all reference groups that make up the school population.



Straub (1974) attempted to contrast the perceptions of leader behavior of directors of vocational education in vocational technical schools. A total of four subgroups were involved in describing the director's leader behavior: superintendents; the directors; vocational coordinators; and vocational principals. Differences were noted between the superintendents and the vocational directors on both the consideration and initiating structure dimensions of leadership behavior. Differences were also found between the vocational directors and vocational principals on both dimensions of leader behavior. Straub concluded that the Leader Behavior Description Questionnaire effectively discriminates differential perceptions by permitting empirical comparison of perceived leader behavior by different subgroups within the school population.

The preceding studies cited provide substantial evidence that leadership behavior may be perceived in a variety of ways by the leader's constituents. This phenomenon has proven true in a variety of educational institutions with a diverse group of school-related groups.

In summary, studies that have been conducted in military, industrial and educational settings to relate leadership behavior to staff morale and organizational effectiveness have resulted in some consensus that the leader who is seen as exhibiting simultaneously high consideration and initiating structure is most successful both in terms of unit effectiveness and staff morale. There is some limited evidence that situational factors serve to moderate the generally agreed upon relationship between perceived leadership behavior and morale. No investigations were found of the interrelationships among the three phenomena of (1) perceived leader behavior; (2) teacher morale; and (3) school effectiveness. The investigation of these interrelationships was a

major purpose of the present study.

There is considerable evidence that teacher status is a variable which explains differences in perceptions of leadership behavior. This phenomenon held true in a number of empirical studies.

This chapter has presented a review of the relevant literature and research in the theoretical areas which form the foundation for the present study. Chapter 3 will present a discussion of the methodology for the study to include: (1) locale of the study; (2) selection and description of the research sample; (3) data collection procedures; (4) instrumentation; (5) research design; and (6) statistical analysis of data.

## Chapter 3

### Methodology

The purpose of the study was to investigate empirically inter-relationships among teacher perceptions of the leader behavior of their principals, their expressions of morale, and their assessments of the output of their schools. This chapter will present a discussion of the methodology employed for the study.

#### Locale of the Study

The population used in the present study included ten secondary schools of the Roman Catholic Diocese of Richmond, Virginia.

The Roman Catholic Diocese of Richmond covers a land area of 33,235 square miles and has a Catholic population of 105,000 out of a total population for the Diocese of about 3,400,000 or less than three percent. The Diocese covers the entire land area of the Commonwealth of Virginia with the exception of 21 counties in Northern Virginia which comprise the Diocese of Arlington.

The Diocese of Richmond operates a total of twelve secondary schools with a student population of approximately 2,200.

#### Selection and Description of the Sample

Of the twelve secondary schools in the Diocese of Richmond, eleven participated in the study. The other school chose not to participate due to the uncertain status of its future at the time of the study. The participating schools and their locations are listed below:

Benedictine High School, Richmond, VA

Marymount High School, Richmond, VA

St. Gertrude High School, Richmond, VA

St. John Vianney High School, Richmond, VA

Norfolk Catholic High School, Norfolk, VA

Portsmouth Catholic High School, Portsmouth, VA

Peninsula Catholic High School, Newport News, VA

Walsingham High School, Williamsburg, VA

Gibbons High School, Petersburg, VA

Holy Cross High School, Lynchburg, VA

Roanoke Catholic High School, Roanoke, VA

Permission to conduct the study was granted by Sister Lourdes Sheehan, Diocesan Superintendent of Schools, on April 12, 1976. A copy of the letter of authorization to conduct the study is presented in Appendix A.

The total population of religious and lay teachers at the time of the study was 132 lay and 51 religious teachers. The data collection instruments were administered to a total of 128 lay teachers and 48 religious teachers available to respond on the dates of visitation at the schools. From the total population of teachers surveyed, subsamples were selected for purposes of testing empirical hypotheses formulated for the study. Two groups of 48 respondents comprised the subgroups of lay and religious teachers.

The sample of 48 lay teachers was drawn by randomly selecting the responses of 48 lay teachers using the table of random numbers. The other subsample comprised virtually the entire population of religious teachers, and the responses of all 48 teachers surveyed were used.

### Data Collection Procedures

Each of the secondary schools in the Diocese of Richmond was contacted by letter on May 19, 1976. A copy of the letter is presented as Appendix B. Principals were provided with a copy of the letter of authorization to conduct the study from Sister Lourdes Sheehan, Diocesan Superintendent of Schools, and provided with self-addressed return post-cards for replying to the research proposal. Each principal was furnished the telephone number of the researcher and told that he could call collect and seek resolution of any questions concerning the purposes or procedures for the research. Of the twelve principals contacted, eleven agreed to participate. Subsequent telephone contact was made with those principals agreeing to participate and appointments were made for school visitations. All data supporting the present study were collected during the period beginning on October 27, 1976, and continuing through January 12, 1977.

A major clarification about the research was communicated and that message clearly stated that the purpose of the study was not to compare one diocesan high school with another. Principals were promised a profile of morale scores for their schools and comparative scores for other participating schools, but school-by-school morale profiles are not included within the scope of this study and will not be reported here. Each participating school principal was also furnished the national norms published by the developers of the Purdue Teacher Opinionnaire to aid in his self-assessment of the status of morale at the secondary school.

Data collection instruments were administered at each school on the day reserved for the visit by the researcher. In all cases,

principals greatly assisted in the data collection effort by setting aside a period of time for the exclusive use of the researcher.

Each group of teachers was given a short oral presentation by the researcher about the research study and the importance of their participation. Each teacher was then presented with an envelope containing the following materials:

1. A short description of the dissertation (Appendix C).
2. A demographic data collection instrument (Appendix D).
3. The Leader Behavior Description Questionnaire.
4. The Purdue Teacher Opinionnaire.
5. The Organizational Questionnaire.

The teachers' perceptions of the leadership behavior of their principals was measured by the Leader Behavior Description Questionnaire. The Purdue Teacher Opinionnaire was administered to collect data relating to the morale of teachers, and the Organizational Questionnaire was used to measure teacher assessments of the organizational output of their schools.

In addition to the three aforementioned data collection instruments, a demographic data instrument (Appendix D) was developed by the researcher to collect demographic data on: (1) experience; (2) age; (3) religious or lay status; (4) religion; (5) sex; and (6) formal education. The collection of these demographic data was designed to provide controls in the statistical analysis for the effects of the assorted variables.

The teachers participating in the study were assured complete anonymity. The only identification used on the data collection instruments was a code number designed to keep all instruments completed by

a given respondent together.

The researcher was allowed approximately one hour to meet with teachers for the purpose of administering the instruments, and this allotment of time proved sufficient in all cases except one. In this instance the teacher was provided with a stamped self-addressed envelope with which to return the data collection instruments to the researcher.

#### Description of the Research Instruments

The instruments used in this study included: (1) the Leader Behavior Description Questionnaire (LBDQ) developed by Hemphill and Coons (1957); (2) the Purdue Teacher Opinionnaire (PTO) developed by Bentley and Rempel (1970); and (3) the Organizational Questionnaire (OQ) developed by Schuttenberg (1972).

#### Leader Behavior Description Questionnaire

The Leader Behavior Description Questionnaire was developed in 1957 by the staff of the Personnel Research Board of the Ohio State University. The original LBDQ was developed by Hemphill and Coons (1957). Halpin and Winer (1952) identified "initiating structure" and "consideration" as two fundamental dimensions of leader behavior. These two dimensions were identified on the basis of a factor analysis of the responses of 300 B-29 crew members who described the leadership behavior of their aircraft commanders. Initiating structure and consideration accounted for about 34 to 50 percent, respectively, of the common variance. In the manual for the administration of the LBDQ, Halpin (1957) explains its design and purpose. He states that the Leader Behavior Description Questionnaire provides a technique whereby group members may describe the perceived leader behavior of their supervisors. The

LBDQ contains items designed to measure the two components of leadership behavior formulated through the Ohio State leadership studies; namely, initiating structure and consideration. The LBDQ is a 40-item Likert-scaled self-administering inventory. Fifteen items address the initiating structure dimension of leader behavior and fifteen items assess the consideration dimension. A total of ten of the 40 items are not scored. Each item is a descriptive statement of the following type:

He rules with an iron hand.

He works without a plan.

He is easy to understand.

He is slow to accept new ideas.

Each item calls for a choice from among the following adverbs: always; often; occasionally; seldom; and never.

The ten unscored items remaining in the 1957 edition of the LBDQ have been retained in the instrument in order to keep the conditions of administration similar to those used in the validation of the questionnaire. The score for the consideration dimension is the sum of the scores assigned to the 15 items in that dimension. The scoring for the initiating structure dimension is done similarly. The possible range of scores for each dimension is from 0 to 60. A total score on both dimensions measured by the LBDQ is the sum of the consideration and initiating structure subscores.

Reliability/Validity. Halpin (1956) indicates that the estimated split-half reliability is .83 for initiating structure and .92 for consideration (Lake, Miles & Earle, 1973, p. 131).

Lake and others (1973) report evidence of construct validity for



the LBDQ. Hemphill (1955) found that college department heads ( $N = 22$ ) who were high on both initiating structure and consideration led departments with a reputation among faculty members for being well-administered.

In studies of concurrent validity, Halpin (1954) found that with interaction effects partialled out, consideration scores correlated with a crew satisfaction index at .63 ( $p < .01$ ). Initiating structure correlated at  $-.48$  ( $p < .05$ ).

Halpin's (1956) study of 50 Ohio public school superintendents found that school staffs and boards were generally in agreement among themselves, but only in chance agreement with each other in rating superintendents. Only school staff scores versus self-descriptions were significantly correlated (.37,  $p < .01$ ). Miles (1965) strongly emphasizes that in no way can the two groups of aircraft commanders and educational administrators be considered as normative groups. Halpin (1957) also makes this point clear: "At present we do not have LBDQ data available on many different types of leaders. What data we have should not be construed as norms. . . ." (p. 3).

Halpin (1957) and Lake, Miles and Earle (1973), in addressing the interpretation of LBDQ data, state that the two dimension scores obtained for consideration and initiating structure should be regarded as specific to the relationship of a given leader to his work group, rather than as having a firm value relative to norm groups. Lake and his associates conclude that the "LBDQ is plausible, deals with factors central to leader behavior, and is easy to use" (p. 131).

Rationale for Selection of the LBDQ. The Leader Behavior Description Questionnaire has been administered in a wide variety of situations

in industrial, military and educational institutions. It has been used for the study of the commanders and crew members in the Department of the Air Force; commissioned officers and civilian administrators in the Department of the Navy; foremen in a manufacturing plant; executives in regional cooperative associations; college administrators; school superintendents, principals, and teachers; and leaders in a wide variety of student and civilian groups and organizations.

A more recent version of the LBDQ (Form 12) has been developed by Stogdill (1963). This newest LBDQ-XII, encompassing twelve subscales, has been found to yield two major factors labeled "system-orientation" and "person orientation". It was concluded by Sergiovanni and Carver (1973) that these two factorial dimensions are very closely related to the previously identified "consideration" and "initiating structure" dimensions measured by the original version of the LEDQ. It should also be pointed out that the original edition of the LBDQ has a total of 40 items while the newer (1963) version (Form 12) has 100 items which essentially measure the same two leadership phenomena.

A review of other instruments available to measure the consideration and initiating structure dimensions of leadership behavior failed to uncover scales that are as widely accepted or applicable to educational institutions as is the LEDQ.

#### Purdue Teacher Opinionnaire

The Purdue Teacher Opinionnaire, or PTO for short, is designed to measure teacher morale on a number of dimensions which are said to constitute a generalized state of teacher morale. The instrument is widely used by school administrators to assess morale in particular schools or school systems (Bentley & Rempel, 1970).

The Purdue Teacher Opinionnaire was originally developed in 1961 and consisted of 145 items selected and logically grouped to sample eight categories pertaining to the teacher and his working environment. The original form of the PTO included eight subcategories: (1) teaching as an occupation; (2) relationships with students; (3) relationships with other teachers; (4) administrative policies and procedures; (5) relationships with community; (6) curriculum factors; (7) working conditions; and (8) economic factors. Bentley and Rempel (1970) describe the development of the first form of the PTO and state that an experimental form was administered to a large representative sample of secondary school teachers. The final selection of items for the instrument was based on an internal consistency item analysis technique. The Kuder-Richardson internal consistency reliability coefficients for the eight subcategories ranged from .79 to .98, with an overall reliability of .96.

The original version of the PTO was tested for construct validity through the use of peer judgments from a sample of teachers who were asked to identify "high", "middle", and "low" morale groups. The instrument's construct validity was determined by comparing the peer judgments with the opinionnaire scores.

The PTO was developed by Bentley and Rempel (1970) with a multi-dimensional concept of morale as a basic assumption. According to its developers, the multi-dimensional nature of morale suggests the use of factor analysis methods in isolating dimensions of morale. Bentley and Rempel used the advice of writers such as Richardson and Blocker (1963) who suggested strongly that factor analytic techniques used in industrial research to identify dimensions of morale should be applied to

educational institutions.

Bentley and Hempel factor analyzed the opinionnaire using a principle components analysis of an image-covariance matrix and continued with an oblique rotation of extracted factors. Eight factors comprising a cumulative total of over 50 percent of the variance were extracted as a result of the factor analysis technique. The current edition of the PTO was developed using similar factor analytic methodology. The additional analysis made it possible to extract ten factors using the 100-item instrument. Following is a brief description of the ten factors included in the current edition of the Purdue Teacher Opinionnaire:

Factor 1 -- "Teacher Rapport with Principal" deals with the teacher's feelings about the principal--his professional competency, his interest in teachers and their work, his ability to communicate, and his skill in human relations.

Factor 2 -- "Satisfaction with Teaching" pertains to teacher relationships with students and feelings of satisfaction with teaching. According to this factor, the high morale teacher loves to teach, feels competent in his job, enjoys his students, and believes in the future of teaching as an occupation.

Factor 3 -- "Rapport Among Teachers" focuses on a teacher's relationships with other teachers. The items here solicit the teacher's opinion regarding the cooperation, preparation, ethics, influence, interests, and competency of his peers.

Factor 4 -- "Teacher Salary" pertains primarily to the teacher's feelings about salaries and salary policies. Are salaries based on teacher competency? Do they compare favorably with salaries in other school systems? Are salary policies

administered fairly and justly, and do teachers participate in the development of these policies?

Factor 5 -- "Teacher Load" deals with such matters as record-keeping, clerical work, "red-tape", community demands on teacher time, extra-curricular load, and keeping up to date professionally.

Factor 6 -- "Curriculum Issues" solicits teacher reactions to the adequacy of the school program in meeting student needs, in providing for individual differences, and in preparing students for effective citizenship.

Factor 7 -- "Teacher Status" samples feelings about the prestige, security, and benefits afforded by teaching. Several of the items refer to the extent to which the teacher feels he is an accepted member of the community.

Factor 8 -- "Community Support of Education" deals with the extent to which the community understands and is willing to support a sound educational program.

Factor 9 -- "School Facilities and Services" has to do with the adequacy of facilities, supplies and equipment, and the efficiency of the procedures for obtaining materials and services.

Factor 10-- "Community Pressures" gives special attention to community expectations with respect to the teacher's personal standards, his participation in outside-school activities and his freedom to discuss controversial issues in the classroom.

(Bentley & Rempel, 1970, p. 4)

Administration and Scoring. The directions for completing the Furdue Teacher Opiniionnaire are provided on the cover page and the authors describe the instrument as "self-administering." No time limit is imposed in the directions and experience has shown that most teachers

can complete the instruments in about 20 minutes. The administration instructions on the cover sheet of the questionnaire assure respondents that their anonymity will be protected.

The PTO may be scored by hand using the instructions provided in the manual, or it is adaptable to machine scoring. For the purpose of the present study, Form A (consumable edition) was used and respondents recorded responses directly on the instrument. An opinionnaire key is provided to the researcher for use in scoring the instruments and numerical values are assigned to each item by using the keyed weights provided and identifying the appropriate factor for each item. Examples of scoring are shown below:

#### Examples of Scoring

Item #2 The work of individual faculty members is appreciated and commended by our principal . . .

(A) PA PD D 4-1

Item #17 Our school has a well-balanced curriculum . . .

A PA (PD) D 2-7

In item number 2 above the teacher agreed with the statement and an agreement on this particular item is weighted four points in the manual so a score of four for that item is assigned. The item measures "teacher rapport with principal" and is therefore noted as belonging to factor 1. Item number 17 above is scored in a similar manner. The four possible choices for the respondent to each item are: (1) agree; (2) probably agree; (3) probably disagree; and (4) disagree. The items that are negatively stated (for example, "the number of hours a teacher must work is unreasonable") are scored in reverse direction so that an "agree" response to these items is worth one point.

Factor scores are obtained by summing the weights which have been

assigned to the items belonging to that factor. A total morale score is computed by summing the subscores on the ten morale factors. Table 1 indicates how the factor and total scores can be obtained.

Interpretation of Scores. The Purdue Teacher Opinionnaire is a normative instrument, and the manual contains several tables which enable the researcher to compare the morale of a given faculty with that of other school faculties comprising the population on which the norms were developed. The manual also provides item medians and item median profile sheets. Since the present study was not primarily concerned with a comparative analysis of the morale among schools in the Diocese of Richmond, minimal use was made of the normative data. As was previously mentioned, participating school principals were furnished with normative data to use in their assessments of the state of morale within their respective schools. For the purpose of the present study, the total score of the Purdue Teacher Opinionnaire for each respondent was used as an overall measure of morale and treated as an intervally measured dependent variable in the testing of the empirical hypotheses.

Reliability/Validity. Reliability data were furnished by Bentley and Rempel (1970) for the current edition of the Purdue Teacher Opinionnaire. They describe the process and state that the revised form was administered to a sample of high school faculties in Indiana and Oregon. A total of 60 schools from Indiana and 16 schools from Oregon were selected as the sample. After a period of four weeks, the PTO was re-administered and test-retest reliability data were obtained for a total of over 3,000 teachers. The test-retest correlations for the total scores and ten factors are contained in the user's manual and averaged .87.

Table 1

Purdue Teacher Opinionnaire Scores

<u>Factor Number</u>		<u>Number of Items</u>	<u>Factor Score</u>
1	Teacher Rapport With Principal	20	_____
2	Satisfaction With Teaching	20	_____
3	Rapport Among Teachers	14	_____
4	Teacher Salary	7	_____
5	Teacher Load	11	_____
6	Curriculum Issues	5	_____
7	Teacher Status	8	_____
8	Community Support of Education	5	_____
9	School Facilities and Services	5	_____
10	Community Pressures	5	_____
	Total	100	



In a frequency distribution of individual school test-retest correlations for total scores it was demonstrated that about 90 percent of the reliability coefficients were .80 or above.

The validity of the Purdue Teacher Opinionnaire was discussed previously in this chapter in the context of the original development of the PTO. Further validity data for the revised version of the PTO are reported by Bentley and Rempel (1970) and provided in Table 2. In the sample of schools used to gather test-retest data, principals were asked to respond to the opinionnaire as they believed the faculty would respond, and there were no significant differences noted between the median scores of teachers and principals.

In a review of the Purdue Teacher Opinionnaire contained in the Seventh Mental Measurements Yearbook (Buros, 1972), the following conclusions are made:

1. Test-retest data submitted by Bentley and Rempel are reported and the conclusion is made that the total score reliability coefficient of .87 is evidence of relative stability of both the total score and separate factor scores (with the exception of the community pressures factor).
2. The Purdue Teacher Opinionnaire is clearly adequate for research purposes and equally suitable for large group assessment.
3. A median interfactor correlation of .38 is said to support the argument of Bentley and Rempel that the ten factors are relatively independent of each other. (p. 591)

The main criticism of the Purdue Teacher Opinionnaire is that more evidence is needed to support predictive validity. It is suggested that

Table 2  
Median Scores by Factor

Factors	Teachers		Principals
	Indiana	Oregon	Indiana and Oregon*
1	65	64	62
2	71	71	67
3	42	43	44
4	19	20	19
5	36	36	34
6	15	15	15
7	24	24	23
8	15	16	16
9	13	15	14
10	17	17	16

\*The principals reacted to the Opinionnaire items as they believed their faculty would react.

Note. From Manual for the Purdue Teacher Opinionnaire, by Bentley and Rempel, 1970, p. 7.

evidence be gathered which will determine if scores on the PTO are related to objective measures of morale such as teacher turnover and absenteeism. He concludes that the "Purdue Teacher Opinionnaire is a thoughtfully constructed instrument designed to assess teacher morale. Its principal utility at this point is as a research tool" (Buros, 1972, p. 591).

It is as a research tool that the Purdue Teacher Opinionnaire was used in the present study.

Rationale for Selection of the PTO. There are many data collection instruments available for use in assessing morale or job satisfaction in industrial settings. There are few instruments available to assess morale in educational institutions. Yuskiewicz and Donaldson (1972) measured teacher job satisfaction using the Index of Job Satisfaction developed by Brayfield and Rothe (1951). This index was developed to provide a global appraisal of job satisfaction across occupational categories. Sample items contained in the Brayfield-Rothe job satisfaction questionnaire are listed below:

There are some conditions concerning my job that  
could be improved.

It seems that my friends are more interested in  
their jobs.

I feel that I am happier in my work than most  
other people.

I am disappointed that I ever took this job.

Yuskiewicz and Donaldson (1972) report the odd-even product moment reliability coefficient in a sample of female office employees was .77 and when corrected by the Spearman-Brown formula, it was .87.

While the Index of Job Satisfaction may serve the needs of the industrial community very well, it was rejected for the present study as it did not relate directly to the problems and issues confronted by teachers.

A review of the available data collection devices yielded two directly related to the morale of teachers: the Purdue Teacher Opinionnaire and the School Survey. In a 1971 study by Coughlan, the Purdue Teacher Opinionnaire and the School Survey were compared. Elementary and secondary school teachers from a Wisconsin school district completed both instruments. Analysis of the data revealed six significant canonical correlations relating the two morale-measuring scales. The study indicated that teacher morale can be predicted by a number of factors common to both instruments.

A comparative analysis of reliability data revealed that internal consistency reliability coefficients for the original version of the Purdue Teacher Opinionnaire ranged from .79 to .98 with an overall reliability coefficient of .96. Coughlan (1970) reports a lower median internal consistency across all 13 factors of the School Survey as .67.

In terms of content validity, the Purdue Teacher Opinionnaire was determined by this researcher to be more appropriate for the present study due to the nature of the subcategories contained in it as compared to the School Survey. Subcategories or factors of the PTO have previously been described in this chapter. The thirteen factors included in the School Survey are: (1) Board functioning; (2) System administration; (3) Workload; (4) Materials and equipment; (5) Building and facilities; (6) Principal relations; (7) Colleague relations; (8) Community relations; (9) Instructional program; (10) Student development; (11)

Performance appraisal; (12) Financial incentives; and (13) Professional autonomy. Since the Catholic school structure does not provide for school boards with decision-making powers, this factor in the School Survey would be inappropriate to the present study.

#### Organizational Questionnaire

The Organizational Questionnaire, or OQ, for short, was developed by Ernest M. Schuttentberg (1972). The Organizational Questionnaire, though copywrited, is not available for purchase through commercial sources. Accordingly, the researcher contacted Dr. Schuttentberg at Cleveland State University and requested permission to use the instrument in the present study. A copy of Dr. Schuttentberg's letter of authorization to use the Organizational Questionnaire is attached as Appendix E.

The Organizational Questionnaire is designed to analyze organizational functioning using a conceptual model based on systems theory. The conceptual model is based upon the Organizational Output Analysis Model developed by Immegart and Filecki (1969). Briefly, the model delineates ten results, or outputs, of organizational system action: (1) Product Utility; (2) Service Utility; (3) Self-Actualization; (4) Group Decision-making; (5) Individual's Flexibility to Change; (6) Adaptability; (7) Identity Sense; (8) Capacity to Test Reality; (9) Desirability of Feedback; and (10) Penetration of Feedback. The ten outputs outlined by Immegart and Filecki in their theoretical formulation are grouped to form four dimensions of organizational output: (1) Productivity; (2) Integration; (3) Organizational Health; and (4) Feedback. The dimensions and subcategories of the Organizational Questionnaire (OQ) are summarized in Table 3.

Table 3  
Dimensions and Subcategories of the  
Organizational Questionnaire

Dimensions	Subcategories
A. Productivity (PR)	A1. Product Utility (PRU) A2. Service Utility (SRU)
B. Integration Potential (IP)	B3. Self-Actualization (SAC) B4. Group Decision- Making (GDM) B5. Individual's Flexibility to Change (IFC)
C. Organizational Health (OH)	C6. Adaptability (ADA) C7. Identity Sense (IDS) C8. Capacity to Test Reality (CTR)
D. Evaluation (EV)	D9. Desirability of Feed- back (DOF) D10. Penetration of Feedback (POF)

Note. From "Relationship Between Administrative Behavior of Principal and Quality of Organizational Output," by Fleming, 1974, p. 54.

The operational definitions of the four dimensions and the ten subcategories are as follow:

1. Productivity--the tangible or intangible goods, services, and influences resulting from organizational systems action. These goods, services and influences affect the organization's customers and clients in particular and the larger community in general.
  - a. Product Utility (A1)--The attainment of organizational goals or the fulfillment of organizational purposes. That is, what has been done by the organization in terms of what it set out to do in order to perpetuate and enhance the organizational system. The usefulness of organizational output to the community it serves.
  - b. Service Utility (A2)--The value of the services rendered by the organization to the community at large, apart from the products or services produced by the organization for its own perpetuation or enhancement. The efforts of the organization to contribute to the general welfare or to help solve environmental or societal problems.
2. Integration Potential--the meshing of the needs, capabilities, and goals of individual organizational members and groups with the needs and goals of the organizational system.
  - a. Self-Actualization (B3)--The degree to which the individual is able to realize his highest goals, attained or attainable, through the acceptance, willingness, and encouragement of the organization. The degree to which the organization recognizes the individuality of its members

and encourages each member to become all that he is capable of becoming.

- b. Group Decision-Making (B4)--The degree to which the organization encourages individual and group involvement with the power sub-system in making decisions regarding the planning and production of the means to the organizational goals. The extent to which administrators are cognizant of the information and expertise possessed by their staffs and, in the light of their own limitations, choose to be advised by those whose specialties make them more knowledgable.
  - c. Individual's Flexibility to Change (B5)--The degree of willingness by the individual member and member groups to attempt or accept innovation. The security of individuals in their position in the organization as shown by their willingness to take risks without feeling they will be unduly penalized for failure.
3. Organizational Health--a characterization of the life state of an organization. The organization's ability to maintain itself and its productivity in terms of the dynamic interaction of the organization and its environment.
    - a. Adaptability (C6)--The ability of the organizational system to solve problems and to react with flexibility to changing environmental demands over a range of future years. The ability to set and update priorities and objectives in the light of environmental requirements.
    - b. Identity Sense (C7)--The degree to which the organizational



system, subsystems, and individuals possess basic knowledge and insight regarding organizational purposes, goals, and methods of operation. The degree to which the goals of the organization are widely understood and shared by the members.

c. Capacity to Test Reality (C8)--The degree to which the organization is able constantly to search out and correctly interpret environmental factors, especially those which have relevance for the functioning of the organization.

4. Evaluation--the monitoring process through which an organization assessed itself. The inspection and modification of organizational resources, processes, procedure, activities, and effects relative to organizational purposes and objectives.

a. Desirability of Feedback (D9)--The degree of feedback from within the organization and from its environment that is desired and encouraged by those in positions of responsibility and authority within the organization.

b. Penetration of Feedback (D10)--The ease with which feedback reaches the persons most responsible for and holding commensurate authority for implementing change. The amount of distortion of feedback as it passes upward within the organization. The amount of feedback to effect change. (Schuttenberg, 1972, pp. 25-28)

The Organizational Questionnaire (OQ) assesses organizational output on the four dimensions and ten subcategories of the organizational

output model described above (Immegart & Pilecki, 1969). The OQ consists of forty items, four in each of the ten subcategories. Each item is answered using a numerical scale from one to six, depending upon how the respondent views his organization as it is now, as he would like to see it ideally, and the importance of change from the real to the ideal to him personally. The possible responses to each item are: (1) Practically none, to a very small degree; (2) Not very, not very much; (3) Moderately (on the low side); (4) Moderately (on the high side); (5) Very, to a high degree; and (6) Extremely, to a very high degree. An example of a statement which the respondent had to answer in terms of how he sees the organization now (column A), as he feels it should be (column B), and the importance of change to him (column C) is as follows:

22. The degree to which the organization  
is successful in accomplishing its goals.

The respondent indicates the frequency with which he perceives the ability of the school to meet its goals by choosing the appropriate response from among the six alternatives listed above.

Administration and Scoring. The OQ is a self-administering instrument which instructs the respondent on how to complete the form. Schuttenberg (1972) states that it is of crucial importance, when using the OQ, that the definition of the organizational system be clearly communicated to the respondents. Accordingly, the researcher emphasized to each group of teachers that the "organization" means the school in which they presently teach. Additionally, the researcher entered into each copy of the OQ in the space provided the name of the school which was to be evaluated by teachers. Schuttenberg (1972) advises that "it is recommended that the instrument be administered in a group setting

rather than being mailed out to be returned later" (p. 157). This advice was followed in the present study.

Schuttenberg also stresses the importance of preserving the anonymity of respondents and this principle was strictly followed. Respondents were told orally that their anonymity would be preserved, and they were encouraged to respond in a candid manner.

Each of the forty items in the OQ is responded to in three response modes (IS NOW, SHOULD BE and IMPORTANCE) on a 1 to 6 response continuum. Each respondent, therefore, makes 120 responses. Individual responses to the Organizational Questionnaire are combined to yield the following profiles and indexes:

1. Perceived Organizational Output Profile: A numerical report of how the members of the organization perceive the results of the organization's functioning. This profile consists of the responses to the 40 OQ items in response mode A (IS NOW, column A).
2. Desired Organizational Output Profile: A report similar to 1 above indicating how members feel the organization should be in the various dimensions and subcategories.
3. Need for Change Index: A numerical report of the comparison between the Perceived and Desired Organizational Output Profiles. Discrepancy scores for each subcategory can be computed by summing the differences in responses to columns A and B.
4. Desire for Change Index: A numerical report of the importance to organizational members that changes be made in the direction of the Desired Organizational Output Profile. (Schuttenberg, 1973, pp. 33-34)

In the present study, respondents completed the entire OQ even though only the scores for response mode A (Perceived Organizational Output Profile) were used in the statistical testing of the hypotheses generated for the study.

Interpretation of Scores. Schuttenberg (1972), in discussing the interpretation of OQ scores, states that "the total score is a composite rating made up of all the items, dimensions and subcategories of the Organizational Questionnaire" (p. 98). As such, the composite rating may generally be interpreted as an overall perceptual index of the organization as seen by the respondents. In the present study, the Perceived Organizational Output Profiles were used as measures of the teacher assessments of school effectiveness and treated as intervally measured dependent variables in the testing of empirical hypotheses.

Reliability/Validity. An extensive discussion of the validation of the OQ is presented by Schuttenberg. In August, 1969, he conducted an analysis of an electronics parts plant in the Boston area using a seventeen-item questionnaire based on the Organizational Output Model. The questionnaire was completed by 49 members of the organization and was subjectively determined by Schuttenberg to be potentially useful for organization analysis. A subsequent 1970 study used a sample of 200 managers and technicians at two large industrial plants to complete an expanded version (49 items) of the OQ. These two pilot studies resulted in the development of Forms Q and S of the OQ. Both forms contained an identical 40 items, but the presentation of the items and the methods of response differed. Form Q presented the items in question form, and the response to each item was made by choosing a number from one to six as previously described in this chapter. Form S

presented the same items in statement form, but the response to each item was made by indicating the extent of disagreement or agreement on a six-point scale ranging from "strongly disagree" to "strongly agree". In order to gather data on the validity of the OQ and to compare the two response methods, Forms S and Q were administered to ten persons who were members of business and educational organizations. After each respondent had completed both forms of the instrument, he was interviewed using ten structured questions designed to determine whether each respondent viewed his organization as "high", "medium" or "low" in each of the ten subcategories of the Organizational Output Analysis Model. Responses to the questions were compared to each person's scores on both forms of the OQ using the following procedure: "low" was considered to correspond to mean responses of from 1.00 to 2.50 on the OQ scale; "medium", 2.51 to 4.50; "high", 4.51 to 6.00. Form Q had a higher correspondence between verbal ratings and OQ mean scores than did Form S and was subsequently chosen as being most valid. The validity data reported for Form Q are tabulated in Table 4.

Schuttenberg claims that the high correspondence between verbal ratings and mean OQ scores for Form Q indicates that the instrument is reasonably effective in measuring what it purports to measure.

Additional improvements were made by asking respondents in the validation sample how they would improve the wording of the items and directions of the OQ. In a subsequent revision to the OQ (Form C), the author extended the instrument to include two additional response modes as previously described. Instead of being asked only to indicate their perceptions of the way the organization is now (perceived output), respondents to Form C were asked to indicate how they felt the organization

Table 4  
Correspondences Between Verbal Ratings of  
Organizations and Mean OQ Scores on  
Form Q For the Ten OQ  
Subcategories (N = 10)

OQ Sub- Categories	Verbal Ratings (Form Q)		
	Within Range <sup>a</sup>	Above Range	Below Range
A1 - PRU	60	10	30
A2 - SRU	90	10	0
B3 - SAC	60	40	0
B4 - GDM	70	0	30
B5 - IFC	80	20	0
C6 - ADA	100	0	0
C7 - IDS	90	0	10
C8 - CTR	70	0	30
D9 - DOF	60	30	10
D10- POF	90	10	0

<sup>a</sup>Numbers in the Table indicate the percent of verbal rating of the organization that were within, above, or below the corresponding range of scores on Form Q of the OQ.

Note. From "The Development of a General-Purpose Organizational Output Instrument and its Use in the Analysis of an Organization," by Schuttenberg, 1972, p. 61.

should perform (desired output), and how important it was to them personally that any gap between the perceived and desired output be closed. On Form C, the identical response methodology as used in Form Q was employed since this scale could be used for all three response modes. An additional validation process was performed for Form C of the OQ. It was administered to the instructor and students in a graduate-level course on research methods taught at Boston University. All subjects responded that the results of the instrument accurately depicted their true assessments of the organizational functioning of their organizations.

Reliability data for the OQ were collected on Form C during January, 1971. A test-retest reliability of the form was conducted with 27 graduate students where their perceptions of the School of Education were measured. The OQ was administered twice to the same respondents with an interval of one week between administrations. Pearson correlation coefficients for all three response modes are summarized in Table 5.

The final form of the OQ is almost identical to Form C except that the word "administration" has been added in parenthesis after the word "management" so that the instrument would be suitable for use in educational institutions. The issue of inter-correlations among the dimensions and subcategories of the OQ was addressed by Schuttenberg. He concludes that there are moderately large inter-correlations and reports median correlation coefficients for the three response modes of .638, .670, and .721 for the four dimensions. He suggests that the data tend to indicate that respondents are able to differentiate between the various dimensions and subcategories of the OQ to a degree.

Rationale for Selection of the OQ. There are a large variety of

Table 5  
 Reliability Coefficients<sup>a</sup> (Pearson) Between  
 First and Second Administration Of  
 The Organizational Questionnaire  
 (Form C - Revised)

Dimension or Subcategory	Mode A (Perceived)	Mode B (Desired)	Mode C (Importance)
A1 (PRU)	.768	.818	.667
A2 (SRU)	.720	.884	.765
B3 (SAC)	.858	.585	.657
B4 (GDM)	.642	.784	.588
B5 (IPC)	.887	.504	.487
C6 (ADA)	.772	.837	.782
C7 (IDS)	.655	.873	.676
C8 (CTR)	.737	.709	.452
D9 (DOF)	.722	.720	.762
D10 (POF)	.541	.623	.598
A (PR)	.767	.809	.806
B (IP)	.823	.716	.739
C (OH)	.775	.868	.694
D (EV)	.675	.658	.797
TOTAL SCORE (T)	.814	.854	.855

<sup>a</sup>All correlations are statistically significant at the .01 level; N=27.

Note. From "Development of a General-Purpose Instrument . . .," by Schuttenberg, 1972, p. 65.



instruments available for measuring various facets of organizational life. Instruments are available to measure such phenomena as: (1) organizational climate; (2) employee attitudes and morale; (3) leadership styles; and (4) personal and interpersonal value systems. The present study uses the Leader Behavior Description Questionnaire to measure perceived leadership behavior and the Purdue Teacher Opinionnaire to assess teacher morale. Despite the relative plethora of instruments available to measure the phenomena listed above, few instruments are available which attempt to measure the extent to which an organization is perceived as producing the expected outcomes or outputs. Schuttenberg (1972) discusses the Organizational Climate Description Questionnaire (OCDQ) (Halpin & Croft, 1963) and suggests that this instrument assesses primarily the integrative potential of the organization or only one of the four dimensions posed by the Organizational Output Analysis Model. The OCDQ includes a subtest dealing with "production emphasis" on the part of the school principal. This subtest, however, assesses the degree to which the principal is perceived as emphasizing production and does not measure perceptions as to how well the institution is meeting its goals.

A review of the instruments available to assess organizational functioning failed to uncover a device which assesses the total functioning of an organization as comprehensively as the Organizational Questionnaire.

The OQ is distinct theoretically from other instruments in that it focuses on perceptions of outputs or results of system actions, rather than on organizational processes.

The Organizational Questionnaire has not been published commercially

and therefore has not been as widely used in the literature as the more readily available commercially produced instruments. There is evidence, however, that the OQ is gaining acceptance as a legitimate tool to assess the organizational output of schools. In a study by Fleming (1974), the OQ was used to assess the teachers' perceptions of the organizational output of the Roman Catholic secondary and elementary schools of the Archdioceses of Detroit and Chicago.

### Research Design and Data Analysis

#### Design of the Study

The major purposes of this study were to investigate the extent to which teachers' perceptions of the leadership behavior of their principals were related to their expressions of morale and assessments of school output. The research questions tested were:

1. Do teacher perceptions of leader behavior relate to teacher morale?
2. Do teacher perceptions of leader behavior relate to their assessments of the output of their schools?
3. Do teacher assessments of the organizational output of their schools serve to moderate the relationship between perceived leader behavior and morale?
4. Are there significant differences in the perceptions of leader behavior by lay and religious teacher groups?

An ex post facto research design was used for the present study since the variables under investigation were teacher perceptions of leader behavior and school output along with teacher expressions of morale. Using Kerlinger's (1973) definition, "ex post facto research is systematic empirical inquiry in which the scientist does not have

direct control of independent variables because their manifestations have already occurred or because they are inherently not manipulable" (p. 218). The independent variables in the study were not susceptible to experimental manipulation, and an ex post facto study was necessitated by this condition.

### Data Analyses

To test empirically the hypotheses formulated for the present study, several data analysis techniques were used. The specific analysis and design used to test each of the empirical hypotheses is presented.

Analysis of Variance. To test Hypothesis 1 and Hypothesis 2, it was necessary to determine differential leadership styles perceived by teachers. There were four principal leadership behavioral styles isolated for investigation following the Ohio State leadership theory. The four leadership behavioral styles have previously been identified as "high consideration/high initiating structure" (HC-HS); "high consideration/low initiating structure" (HC-LS); "low consideration/high initiating structure" (LC-HS); and "low consideration/low initiating structure" (LC-LS). High initiating structure and consideration behavior were determined by using all respondent scores above the median on the two sub-scales of the Leader Behavior Description Questionnaire. In a similar manner, low consideration and low initiating structure behavior were determined by using respondent scores below the median on each of the two dimensions of the LBDQ. The data from the LBDQ were transformed using the data modification procedures contained in the Statistical Package for the Social Sciences (Nie, Hull, Jenkins, Steinbrenner & Bent, 1975). The four levels of the independent variable

derived through the "if" routine were used in performing the analysis of variance to test hypotheses 1 and 2. The analysis of variance design was required due to the transformation of an intervally measured independent variable into a non-metric factor with four treatment levels. Hypotheses 1 and 2 were tested by performing an analysis of variance on the differences in the dependent variables among the four perceived leadership styles: LC-LS; HC-LS; LC-HS; and HC-HS. F ratios were computed to determine if statistically significant differences in teacher morale and teacher assessments of organizational output existed among the four perceived leadership styles. The predictions formulated in hypotheses 1 and 2 were tested by determining the deviation of dependent variables or "y" measures for each of the four leadership styles from the grand means of the dependent variables of teacher morale and organizational output, respectively. The unadjusted deviation statistic produced by the multiple classification analysis was used as a measure of the distance in the dependent variable from the grand mean for each of the four leadership styles perceived by teachers. A posteriori contrasts were performed to determine the source of variation in teacher morale and their assessments of the output of their schools among all perceived leadership styles. A posteriori contrasts systematically compare all possible pairs of group means in the dependent or criterion measures. In a posteriori tests, the groups are divided into homogeneous subsets, where the differences in the means of any two groups in a subset is not significant at some prescribed level. The Scheffé test procedure uses a single range value for all comparisons and is described by Nis and others (1975) as precise, even for unequal group sizes.

Partial Correlation Analysis. To test the prediction made in Hypothesis 3, partial correlation analysis was performed. Partial correlation analysis provides a procedure whereby the researcher can compute a single measure of association describing the relationship between two variables while adjusting for the effects of one or more independent variables. In partial correlation, the control is statistical and is based on assumptions of linear relationships among variables. Hypothesis 3 was tested by performing a simple coefficient of correlation on the relationship between teacher perceptions of leader behavior and their morale. This was followed by the computation of a partial correlation coefficient using perceptions of leader behavior as the independent variable and teacher morale as the dependent variable. Teacher assessments of the output of their schools was used as the control or moderator variable. Hypothesis 3 was supported if the significant relationship between perceived leader behavior and teacher morale remained while controlling for the moderating influence of teacher assessments of organizational output.

Analysis of Covariance. Hypothesis 4 was tested using the analysis of covariance procedure. Nie and his associates (1975) suggest analysis of covariance designs to test hypotheses in which metric independent variables are used in conjunction with non-metric factors. In such designs, the term covariate is used to indicate a metric independent variable while the term factor is used to designate a non-metric or categorical independent variable. The covariate chosen for the analysis of covariance to test Hypothesis 4 was selected using advice presented by Dayton (1970) that covariates be chosen based on their known relationship to the criterion measure. In order to locate intervally

measured independent variables which should be considered for use in the analysis of covariance design, a preliminary pilot data analysis was performed and correlation coefficients were computed on the relationships between assorted demographic and perceptual variables and the dependent variable of perceived leader behavior used in the design to test Hypothesis 4. As a result of the pilot analysis, it was determined that teacher assessments of the output of their schools should be built into the design to test Hypothesis 4 due to the strong linear relationship between these assessments and the perceptions of leader behavior used as the dependent variable in Hypothesis 4 ( $r = .746$ ,  $p < .001$ ). The use of the analysis of covariance to test the validity of Hypothesis 4 enabled the effects of teacher assessments of the output of their schools to be controlled so that the true relationship between the perceptions of leadership behavior and teacher status could be isolated and identified. Nie and others (1975) recommend the analysis of covariance procedure as a device which can remove extraneous variation from the dependent variable and increase measurement precision.

In summary, a variety of data analysis techniques were used to test the hypotheses formulated for the study. The data analyses were performed using procedures contained in the Statistical Package for the Social Sciences (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975).

This chapter has presented a discussion of the methodology used in conducting the study. Chapter 4 will present a discussion of the results.

## Chapter 4

### Results

The results of the statistical analyses of data to determine the interrelationships of perceived leader behavior, teacher morale, and assessments of organizational output are presented in Chapter 4.

The teacher scores on the consideration and initiating structure dimensions of the Leader Behavior Description Questionnaire (LEDQ) constituted the interval measurements of perceived leadership behavior which were transformed into four levels of an independent variable (perceived leadership behavior) used to test Hypotheses 1 and 2. The four levels of the independent variable have previously been described as "low consideration/low initiating structure", "high consideration/low initiating structure", "low consideration/high initiating structure", and "high consideration/high initiating structure."

Teacher composite scores on all ten subcategories of the Purdue Teacher Opinionnaire (PTO) constituted the measure of teacher morale which was treated as a dependent variable in the testing of empirical hypotheses 1 and 3.

Teacher responses to Response Mode A, Perceived Organizational Output Profile, of the Organizational Questionnaire (OQ) constituted the interval measurement of the teacher's assessment of the organizational output of the school. The results of the statistical analyses of data are reported in four sections which deal with each of the four empirical hypotheses tested in the present study.

### Hypothesis 1

Hypothesis 1 states that teachers who perceive their principals as exhibiting behavior which belongs to the "high consideration/high initiating structure" quadrant of the Ohio State Leadership quadrants will have the highest mean morale scores of the four groups.

Hypothesis 1 was tested by performing an analysis of variance which treated perceived leadership behavior as an independent variable with four levels and teacher morale as the interally measured dependent variable. The analysis of variance resulted in an F ratio of 8.85 with 3 and 93 degrees of freedom which indicated that there were significant differences among the expressions of teacher morale under leadership conditions perceived as LC-LS, HC-LS, LC-HS, and HC-HS,

$$\underline{F} (3, 92) = 8.85, \underline{p} < .000.$$

The results are presented in Table 6. While the analysis of variance produced a statistically significant F ratio (  $< .000.$ ), the eta statistic presented in Table 7 demonstrates that the relationship is relatively weak. The multiple R square of .224 represents the proportion of variation in teacher morale explained by the effects of teacher perceptions of leadership behavior of their principals. The multiple R value of .473 indicates the strength of the overall relationship between teacher morale and perceptions of leadership behavior.

The specific prediction formulated in Hypothesis 1 was tested by determining the deviation of the means for each of the four perceived leadership behavioral styles (LC-LS, HC-LS, LC-HS, HC-HS) from the grand mean of teacher morale. Hypothesis 1 was considered to be supported if teachers perceiving the leadership behavior of their principals as "high consideration/high initiating structure" had the highest



Table 6  
 Analysis of Variance -- Teacher Morale

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	<u>F</u> Ratio
Between groups	34,028.60	3	11,342.719	8.855*
Within groups	117,852.313	92	1,281.003	
Total	151,880.500	95	1,598.742	

\* p < .000.

Table 7  
 Multiple Classification Analysis --  
 Teacher Morale

---



---

Grand Mean of Teacher Morale (Measured by PTO)	=	326.22		
---	---	--------	--	--

---

Perceived Leadership Behavioral Style	<u>N</u>	<u>Unadjusted Deviation</u>	<u>Eta</u>
LO CONS - LO STRUCTURE	35	-22.42	
HI CONS - LO STRUCTURE	12	12.86	
LO CONS - HI STRUCTURE	17	-2.75	
HI CONS - HI STRUCTURE	32	21.16	.47
Multiple R Squared		0.224	
Multiple R		0.473	

---

mean morale scores of the four groups describing leadership behavior across the four leadership styles cited above. The unadjusted deviation statistics reflecting the distance in the mean morale scores from the grand mean for each of the four leadership styles are shown in Table 7.

The multiple classification analysis resulted in the behavioral style described as "high consideration/high initiating structure" having the highest mean measures of teacher morale. Thus, Hypothesis 1 was upheld.

The results of the Scheffé test, with a confidence level of .05, indicated that there was a significant difference between the means of teacher morale scores under conditions of LC-LS and HC-HS,  $p < .05$ . There was no significant difference between the teacher morale scores under the conditions of LC-HS and HC-HS and no significant differences existed among the mean teacher morale scores under the conditions of LC-HS, HC-LS, and HC-HS. The source of variation in teacher morale was the leadership style described as HC-HS or an emphasis by the leader on both consideration and initiating structure behavior. Results of the Scheffé test relative to this finding are presented in Table 8.

#### Hypothesis 2

Hypothesis 2 states that the highest mean assessments of organizational output will come from teachers who perceive their leader's behavior as "high consideration/high initiating structure".

Hypothesis 2 was tested in a similar manner as Hypothesis 1, and an analysis of variance was performed which treated the four perceived leadership styles (LC-LS, HC-LS, LC-HS, and HC-HS) as four levels of the independent variable and teacher assessments of organizational

Table 8  
Scheffé Test -- Teacher Morale and  
Leadership Behavior

Homogeneous Subsets	Group	Mean
Subset 1	LC-LS	303.7998
	LC-HS	323.4705
Subset 2	LC-HS	323.4705
	HC-LS	339.0833
	HC-HS	347.3750

Note. Range equals 25.3083 for Scheffé Test at .05 level.

output as the interally measured dependent variable.

The analysis of variance performed on the differences in the dependent variable (assessments of organizational output) across all four perceived leadership behavioral styles resulted in an  $F$  ratio of 9.871 with 3 and 92 degrees of freedom which indicated that there was a significant difference among the teacher assessments of the output of their schools under perceived leadership conditions of LC-LS, HC-LS, LC-HS, and HC-HS,  $F(3, 92) = 9.871, p < .000$ . The results of this analysis of variance are presented in Table 9.

The magnitude of the relationship between teacher assessments of the organizational output of their schools and their perceptions of leadership behavior of their principals is reflected by the eta statistic (.49) in Table 10. The multiple R squared of .244 represents the proportion of variation in teacher assessments of organizational output explained by the independent variable (perceptions of leadership behavior). The overall relationship between the independent and dependent variables is reflected in the multiple R of .493.

Hypothesis 2 was considered to be upheld if the mean assessments of the output of schools by teachers perceiving their principal's leadership behavior as "high consideration/high initiating structure" were highest of the four leadership styles perceived by teachers. The specific prediction generated in Hypothesis 2 was tested by selection of the multiple classification analysis option of the analysis of variance procedure. The unadjusted deviations of each of the perceived leadership styles from the grand mean assessments of organizational output are summarized in Table 10. As can be seen in Table 10, teachers perceiving their principal's leadership behavior as HC-HS had the highest

Table 9  
 Analysis of Variance -- Assessments  
 of Organizational Output

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	<u>F</u> Ratio
Between groups	20,756.77	3	6918.922	9.871*
Within groups	64,486.11	92	700.936	
Total	85,242.88	95	897.293	

\* p < .000.

Table 10  
Multiple Classification Analysis --  
Organizational Output

---

Grand Mean of Organizational Output (Measured by OQ)	=	174.04
---	---	--------

---

<u>Perceived Leadership Behavioral Style</u>	<u>N</u>	<u>Unadjusted Deviation</u>	<u>Eta</u>
LO CONS - LO STRUCTURE	35	-13.53	
HI CONS - LO STRUCTURE	12	6.29	
LO CONS - HI STRUCTURE	17	-12.10	
HI CONS - HI STRUCTURE	32	18.86	.49
Multiple R Squared		0.244	
Multiple R		0.493	

---

mean assessments of organizational output of their schools. While the grand mean of teacher assessments of organizational output across all leadership styles was 174.04, the mean assessments of organizational output by teachers perceiving their principals as exhibiting HC-HS behavior was 192.90 or a deviation of 18.86 from the grand mean. The lowest mean assessments of organizational output were associated with teachers who perceived the leadership behavior of their principals as LC-LS.

The results of the Scheffé test, with a confidence level of .05, indicated that there was a significant difference between the mean assessments of organizational output by teachers under conditions of LC-LS and HC-HS,  $p < .05$ . There was no significant difference between the mean teacher assessments of organizational output under conditions of HC-LS and HC-HS and no significant differences existed among the mean assessments of organizational output under conditions of LC-LS, LC-HS, and HC-LS. The source of variation in teacher assessments of organizational output was the leadership style described as HC-HS or leadership behavior characterized by emphasis on both the consideration and initiating structure dimensions of leadership. Results of the Scheffé test relative to this finding are presented in Table 11.

#### Hypothesis 3

Hypothesis 3 states that there will be a significant coefficient of correlation between teacher perceptions of the leadership behavior of their principals and their morale while controlling for the effect of teacher assessment of organizational output.

To test the prediction made in Hypothesis 3, partial correlation analysis was performed. In the partial correlation analysis which was



Table 11  
Scheffé Test -- Assessments of Organizational  
Output and Leadership Behavior

Homogeneous Subsets	Group	Mean
Subset 1	LC-LS	160.5143
	LC-HS	161.9412
	HC-LS	180.3333
Subset 2	HC-LS	180.3333
	HC-HS	192.9063

Note. Range equals 18.7209 for Scheffé Test at .05 level.

designed to test the validity of Hypothesis 3, teacher perceptions of the leadership behavior of their principals was treated as an inter-  
 vally measured independent variable while teacher expressions of teacher morale constituted the dependent variable. Teacher assessments of the output of their schools was treated as an additional independent inter-  
 vally measured variable which acted as a control or moderating variable. Hypothesis 3 was supported if the significant relationship between perceived leader behavior and teacher morale ( $< .01$ ) persisted while statistically controlling for the effect of teacher assessments of organizational output. A Pearson Product-Moment coefficient of correlation was computed to determine the relationship between teacher perceptions of leadership behavior and their morale and resulted in a coefficient of correlation of .653 which was significant at the .001 level of confidence,

$$\underline{r} = .653$$

$$\underline{N} = 96$$

$$\underline{p} = .001$$

This correlation coefficient indicated that there was a statistically significant relationship between teacher perceptions of leadership behavior and their morale.

A partial correlation coefficient was then computed to determine if the statistically significant relationship persisted while controlling for the influence of teacher assessments of the output of their schools. The partial correlation analysis resulted in a first-order partial correlation coefficient of .34 which was significant at the .001 level of significance,

$$\begin{aligned} \underline{r} &= .34 \\ \underline{N} &= 96 \\ \underline{p} &= .001 \end{aligned}$$

A one-tailed test of statistical significance was used since the theory suggested that a relationship, if any, would be positive in direction. The first-order partial indicated that there was a significant relationship between teacher perceptions of leadership behavior and their morale while controlling for the effect of assessments of organizational output. Hypothesis 3 was accepted.

While the relationship between teacher perceptions of the leadership behavior of their principals and their morale persisted while controlling for the effect of assessment of organizational output, the strength of the relationship was affected. The simple correlation coefficient between one independent and one dependent variable of .65 dropped to .34 when statistical control was established for teacher assessments of organizational output.

#### Hypothesis 4

Hypothesis 4 states that there will be a statistically significant difference in the perceptions of leader behavior of the principal by religious and lay teacher groups comprising the Catholic secondary school population.

The statistical analysis of data to test the validity of Hypothesis 4 was discussed briefly in Chapter 3. The analysis of covariance was selected as the most appropriate procedure since it permits increased measurement precision in the testing of hypotheses in which metric independent variables are used in conjunction with non-metric factors. In this case, teacher status was the non-metric factor. A

covariate is a metric independent variable chosen for inclusion in the design based on its known relationship to the dependent variable or criterion measure. In the present study it was determined through a preliminary correlational analysis that teacher assessments of the output of their schools should be treated as a covariate in the testing of Hypothesis 4 since it was linearly related to perceptions of leadership behavior which was treated as an intervally measured dependent variable in Hypothesis 4, ( $r = .7465, < .001$ ).

In order to test the significance of differences in perceptions of leadership behavior by religious and lay teachers, an analysis of variance was performed. The analysis of variance resulted in an  $F$  ratio of 11.702 with 1 and 94 degrees of freedom,  $p < .000$ , which indicated that perceptions of principal leadership behavior differed in a significant manner for religious and lay teachers. The results of the analysis of variance are presented in Table 12. To test the significance of differences in the perceptions of leadership behavior of principals by religious and lay teachers while controlling for the effect of teacher assessment of organizational output, an analysis of covariance was performed. An  $F$  ratio of 24.839 with 1 and 2 degrees of freedom,  $p < .000$ , indicated that perceptions of principal leadership behavior differed significantly for religious and lay teachers while controlling for the effect of assessments of organizational output. Hypothesis 4 was upheld. The results of the analysis of covariance are presented in Table 13.

An examination of the  $F$  ratios resulting from the analysis of variance (Table 12) and the analysis of covariance (Table 13) demonstrates that the inclusion of a covariate in the research design

Table 12  
 Analysis of Variance -- Perceptions  
 of Leadership Behavior

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	<u>F</u> Ratio
Between groups	2100.0744	1	2100.0742	11.702*
Within groups	16869.8789	94	179.4668	
Total	18969.9533			

\* p < .000.

Table 13  
 Analysis of Covariance -- Perceptions  
 of Leadership Behavior

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	<u>F</u> Ratio
<b>Main Effects</b>				
(Teacher Status)	2100.010	1	2100.010	24.839*
<b>Covariates</b>				
(Assessments of Organizational Output	9007.113	1	9007.113	106.536**
Explained	11107.125	2	5553.563	65.687***
Residual	7862.723	93	84.545	
Total	18969.848	95	199.683	

\*  $\underline{p} < .000.$

\*\*  $\underline{p} < .000.$

\*\*\*  $\underline{p} < .000.$

increased the  $F$  ratio for the main effects of teacher status on the perceptions of leadership behavior from 11.702 with 1 and 94 degrees of freedom,  $p < .000$ , to 24.839 with 1 and 2 degrees of freedom. Results of the multiple classification analysis relative to Hypothesis 4 are presented in Table 14.

Table 14 reflects that for the teacher status factor, the beta statistic decreased from .33 to .17 as the covariate of teacher assessments of organizational output was introduced. The beta statistic of .17 indicates that while teacher assessments of organizational output was related to the teacher perceptions of leadership behavior, the relationship is relatively weak. The multiple R squared of .111 in the second column of the multiple classification analysis (MCA) table represents the proportion of variation in the teacher perceptions of leadership behavior explained by the effect of the lay or religious status of the teacher. The multiple R squared statistic in the last column of the MCA table (.586) represents the proportion of variation in perceptions of leadership behavior explained by the status of teachers plus that variation explained by teacher assessments of organizational output of their schools. This multiple R squared of .586 leaves approximately 41 percent of unexplained variance in perceptions of leadership behavior. The multiple R of .765 in the third column of Table 17 indicates the overall relationship between the criterion measure or dependent variable (perceptions of leadership behavior) and the nominally measured (teacher status) and interally measured (assessments of organizational output) independent variables.

This chapter has presented the findings relative to the hypotheses tested in the present study. Chapter 5 will present a discussion of

Table 14  
Multiple Classification Analysis --  
Perceptions of Leadership Behavior

Grand Mean							
of							
Perceived							
Leadership							
Behavior							
= 85.82							
(As measured by LBDQ)							
<u>Teacher Status</u>	<u>N</u>	<u>Unadjusted Deviation Eta</u>		<u>Adjusted for Independents Dev'n Beta</u>		<u>Adjusted for Independents and Covariates Dev'n Beta</u>	
RELIGIOUS	48	-4.68		-4.68		-2.42	
LAY	48	4.68	0.33	4.68	0.33	2.42	0.17
Multiple R Squared				0.111		0.586	
Multiple R				0.333		0.765	



the findings, a summary of the study, conclusions and implications for educational practitioners.

## Chapter 5

### Summary, Discussion, and Recommendations

The first four chapters presented the statement of the problem, provided a review of literature and selected research, outlined the design of the study, and presented the findings. This chapter will contain a summary of the study to this point, followed by a discussion of the findings with implications for educational administration, and recommendations.

#### Summary

The purpose of the study was to investigate the interrelationships among teacher perceptions of leadership behavior, teacher morale, and their assessments of the organizational output of the schools.

The Leadership Behavior Description Questionnaire (Hemphill, 1957) was chosen to measure teacher perceptions of the leadership behavior of their principals along the "consideration" and "initiating structure" dimensions of leadership formulated as a result of the Ohio State leadership studies (Stogdill & Coons, 1957). The Leadership Behavior Description Questionnaire yields scores for the consideration and initiating structure dimensions as well as a total score of perceived leadership behavior on both dimensions.

The Purdue Teacher Opinionnaire (Bentley & Rempel, 1970) was used to assess teacher morale. The instrument has ten sub-scales which address ten morale factors: (1) Teacher Rapport with Principal; (2) Satisfaction with Teaching; (3) Rapport Among Teachers; (4) Teacher Salary;

(5) Teacher Load; (6) Curriculum Issues; (7) Teacher Status; (8) Community Support of Education; (9) School Facilities and Equipment; and (10) Community Pressures. A total morale score can be computed along with scores for each of the ten morale factors.

Teacher assessments of the output of their schools were measured by the Organizational Questionnaire (Schuttenberg, 1972). The Organizational Questionnaire is designed to analyze organizational functioning using a conceptual model based on system theory (Immegart & Pilecki, 1969). The results or outputs of organizational system action are grouped in the Organizational Questionnaire (OQ) to form four distinct dimensions of organizational output: (1) Productivity; (2) Integration Potential; (3) Organizational Health; and (4) Evaluation. The OQ measures perceptions of organizational output in three response modes (IS NOW, SHOULD BE, and IMPORTANCE). The instrument yields two profiles and two indexes: (1) Perceived Organizational Output Profile; (2) Desired Organizational Output Profile; (3) Need for Change Index; and (4) Desire for Change Index. In the present study, respondents completed the entire OQ even though only scores for response mode A (IS NOW) or Perceived Organizational Output Profile were used in the testing of hypotheses.

Data collected were analyzed by use of the Statistical Package for the Social Sciences (Nie, Hull, Jenkins, Steinbrenner & Bent, 1975). Data analysis methods employed to test hypotheses generated for the study included analysis of variance, analysis of covariance and partial correlation analysis.

### Questions

The following research questions were addressed in the study:

1. Do teacher perceptions of leader behavior relate to teacher

morale?

2. Do teacher perceptions of leader behavior relate to their assessments of the output of their schools?
3. Do teacher assessments of the organizational output of their schools serve to moderate the relationship between perceived leader behavior and teacher morale?
4. Are there significant differences in the perceptions of leader behavior by lay and religious teacher groups?

### Hypotheses

The following hypotheses were tested to provide answers to the foregoing questions:

Hypothesis 1 -- Teachers who perceive their principals as exhibiting behavior which belongs to the "high consideration/high initiating structure" quadrant of the Ohio State leadership quadrants will have the highest mean morale scores of the four groups: namely, "low consideration/low initiating structure," "high consideration/low initiating structure," "low consideration/high initiating structure," and "high consideration/high initiating structure."

Hypothesis 2 -- The highest mean assessments of organizational output will come from teachers who perceive their leader's behavior as "high consideration/high initiating structure."

Hypothesis 3 -- There will be a significant coefficient of correlation between teacher perceptions of the leadership behavior of their principals and their morale while controlling for the effect of teacher assessment of organizational output.

Hypothesis 4 -- There will be a statistically significant difference in the perceptions of leader behavior of the principal by religious

and lay teacher groups comprising the Catholic secondary school population.

### Findings

Related to the hypotheses, the following findings were drawn from the analyses of the data:

1. The highest mean morale scores came from teachers who perceived the leadership behavior of their principals as belonging to the "high consideration/high initiating structure" quadrant of the Ohio State leadership theory. The lowest mean morale scores came from teachers who described their principal's leadership behavior as "low consideration/low initiating structure." A significant difference existed in the mean morale scores of teachers perceiving their principal's leadership behavior in the lowest and highest quadrants of the Ohio State leadership theory.

2. The highest assessments of organizational output of schools came from teachers who described the leadership behavior of their principals as "high consideration/high initiating structure." The lowest assessments of organizational output came from teachers who described the leadership behavior of their principals as "low consideration/low initiating structure." A significant difference existed in the mean assessments of organizational output by teachers perceiving the leadership behavior of their principals in the lowest and highest quadrants of the Ohio State leadership theory.

3. There was a statistically significant relationship between teacher perceptions of the leadership behavior of their principals and morale while controlling for the moderating effect of teacher assessments of organizational output. While the relationship between

perceptions of leadership behavior and teacher morale persisted while controlling for assessments of organizational output, the strength of the relationship was reduced.

4. There were significant differences in the perceptions of leadership behavior by religious and lay teachers. Lay teachers perceived principals' consideration and initiating structure behavior to be higher than did religious teachers. The significant differences in perceptions of leadership behavior by lay and religious teachers persisted while controlling for teacher assessments of organizational output.

### Discussion

This section will present a discussion of the theoretical considerations investigated in the study in the order of the four hypotheses tested.

#### Leadership Behavior and Teacher Morale

The findings offer support to the notion that leaders who are described by their followers as exhibiting to a high degree consideration and initiating structure behavior are most effective in terms of the morale of employees. The findings support previous research conducted in educational settings by Weed, Mitchell and Moffitt (1976), Wagner (1974), and Bowling (1974). The findings seem to affirm, so far as the research population in this study is concerned, the findings in industrial and military settings summarized by Stogdill (1974) regarding leadership behavior and satisfaction. The Scheffé test demonstrated that the source in variation in teacher morale was the leadership style described as "high consideration/high initiating structure." It is concluded that principals perceived by their teachers as HC-HS

have teachers with significantly higher morale than principals perceived by teachers as exhibiting LC-LS behavior.

#### Leadership Behavior and Teacher

#### Assessments of Organizational Output

Teacher perceptions of the leadership behavior of their principals on the consideration and initiating structure dimensions of the Ohio State leadership theory were significantly related to their assessments of the organizational output of their schools. Principals perceived by teachers as exhibiting "high consideration/high initiating structure behavior had the highest mean assessments of organizational output. Similarly, teachers perceiving the leadership behavior of their principals as "low consideration/low initiating structure" had the lowest mean assessments of the output of their schools. The conclusion is that teacher assessments of the organizational output of their schools are related to their perceptions of the leadership behavior of their principals. Further, the source of variability in teacher assessments of organizational output is teacher perceptions of leadership behavior that is indicative of a high emphasis on both the consideration and initiating structure dimensions of leadership behavior. The findings tend to confirm previous research by Miller (1976) which suggests a relationship between perceptions of leadership behavior of school principals and school output.

The findings for Hypotheses 1 and 2 collectively demonstrate, insofar as the present research population is concerned, the validity of the conclusion that an individual who exhibits both dimensions of leadership behavior and is perceived as high on the consideration and initiating structure dimensions is the most effective both in terms of

meeting the needs of the workgroup and in achieving organizational purposes (Shartle, 1956; Stogdill, 1974).

Leadership Behavior, Teacher Morale and Assessments of Organizational Output

It was found that when teacher assessments of the output of their schools were controlled for, the relationship between teacher perceptions of the leadership behavior of principals and teacher morale persisted in a significant manner. Although a significant relationship between perceptions of leadership behavior and teacher morale persisted while controlling for a third moderating variable, the strength of the relationship was reduced from .65, ( $p < .01$ ) to .34, ( $p < .01$ ). This finding suggests that teacher assessments of the output of their schools serve to moderate the relationship between perceived leadership behavior and morale. Further, this finding lends credence to Korman's (1966) assertion that situational variables may act to moderate the generally agreed upon relationship between leader behavior and morale. The conclusion is that teacher morale in the Catholic schools is affected, at least in part, by the extent to which teachers perceive their schools as meeting organizational goals and objectives.

Perceptions of Leadership Behavior and Teacher Status

The perceptions teachers had of the leadership behavior of their principals varied significantly for religious and lay teachers. This finding confirms previous research by Schuttenberg (1972) and Halpin (1965) that subgroups within a school environment may perceive leadership behavior in significantly differing ways. This result also replicates research by Fleming (1974) in a Catholic school environment which



revealed significant differences in perceptions of leadership behavior of principals by religious and lay teachers in the Roman Catholic Archdioceses of Chicago and Detroit. The present study demonstrates that lay teachers saw principals as more considerate than did religious teachers. Lay teachers also saw principals as exhibiting more initiating structure behavior. The conclusion is that the status of teachers explained, to some extent, perceptions of leadership behavior. The present study also demonstrates that teacher assessments of the output of their schools covaried with perceptions of leadership behavior. While assessments of organizational output were not a major indicator of the perceptions of leadership behavior, they did account for some of the variance.

#### Recommendations

Specific recommendations are made as follows:

1. Leaders in Catholic schools should recognize the influence their leadership behavior has on teacher morale. They also should recognize that teacher morale is affected by the degree to which teachers perceive the institution as meeting its goals and objectives.

This recommendation takes on particular significance in light of the recent decision by the Bishop of the Diocese of Richmond to close St. John Vianney Seminary High School in Goochland County due to high operating costs and low output in terms of the number of graduates subsequently entering religious vocations. The leader needs to understand that high teacher morale alone doesn't necessarily imply that the school is effective in terms of its institutional mission.

2. Future research might investigate the degree to which a cause-effect relationship may exist between leadership preparation programs in

graduate schools and subsequent patterns of leadership.

While educational administration preparation programs have long focused on leadership theories, more emphasis needs to be placed on how the practitioner in the field can use the body of theory to assess the status of his leadership and its effects on organizational members within the school. The present study suggests that prospective school leaders can be made aware of techniques by which they can determine how their behavioral patterns are perceived by subordinates. The Leader Behavior Description Questionnaire is but one of many methods that could be used by the leader to obtain feedback.

3. Leaders should be trained to institute organizational development programs within their schools.

Organizational development has been practiced for some time in business and industry. This recommendation proposes that the Organizational Questionnaire be used for organizational development programs within both public and nonpublic schools. While the present study used only perceptions teachers had of the organizational output of their schools, the Organizational Questionnaire has three distinct response modes: (1) the organization as it is now perceived to be functioning; (2) the organization as the respondent believes it should be functioning; and (3) the importance to the respondent that the organization move from its present status to the desired level of functioning. Two indexes yielded by the Organizational Questionnaire have potential for understanding the organization. The Need for Change Index demonstrates the extent to which discrepancies exist between perceived and desired organizational output profiles. The Desire for Change Index provides a measure of the importance to organizational members that changes be

made in the direction of the Desired Organizational Output Profile.

4. Additional studies on the relationship between perceived leader behavior and morale need to be performed using objective measures of morale such as turnover and absenteeism. Measures of the productivity of teachers need to be developed to better determine the true relationship between teacher morale and productivity.

Objective measures of teacher morale would help to confirm previous research suggesting a relationship between perceived leadership behavior and teacher morale. A possible indicator of morale might be the degree to which the teacher identifies with the goals of the school. There is a need for an instrument to assess this aspect of morale. As in the previous recommendation, Schuttenberg's Organizational Questionnaire has some promise for assessing the degree to which teachers identify with the goals of the school. The Integration Potential dimension of organizational output is measured in the OQ by a total of three subcategories: (1) self-actualization; (2) group decision-making; and (3) individual's flexibility to change. The respondent scores on the Integration Potential dimension could possibly be used as a measure of teacher morale in future studies.

Investigators have frequently called for better measures of productivity in the context of education. The lack of objective measures of productivity which can be related to the individual teacher continues to make the determination of a relationship between teacher morale and productivity difficult.

5. Studies of multi-dimensional organizational output in the context of education need to be performed to better quantify the total system outputs in education.

According to Cohn and Millman (1974), standardized test results have too often been used as a single measure of school effectiveness. Immegart and Pilecki (1969) provide a useful framework from which the output of schools may be viewed. The Output Analysis Model provides for four dimensions of school output: (1) the effects the school has on its environment in terms of the services it produces; (2) the effects the organization has on its members, both individually and collectively, in terms of their personal development as individuals and their ability to influence the system; (3) the effects the organization has on its own functioning in terms of the ability of the system to cope with changes in the environment in such a manner as to enhance its growth potential over time; and (4) the effects the organization has on the feedback process in terms of the amount and the quality of the evaluative information it receives from within and without and the uses it makes of such information for organizational improvement. The closing of St. John Vianney High School is a case study in the failure of an institution to use feedback to improve organizational effectiveness. The assessment of organizational functioning is particularly important in Catholic education where no governmental charter guarantees the continued operation of a given school.

6. Additional research might focus on the identification of situational variables in both public and nonpublic schools which act to moderate the relationship between principal leader behavior and teacher morale.

It was shown in the present study that the extent to which teachers saw their schools as meeting institutional objectives affected the relationship between morale and leadership behavior. The identification of

other factors which might moderate this relationship would help to explain the total leadership situation.

## Appendix

Appendix A

April 12, 1976

Letter of Authorization  
to Conduct Study

Mr. Mitchell J. Hartson  
1643 Monticello Street  
Petersburg, Virginia 23803

Dear Mr. Hartson:

Several members of the Department of Schools Staff have studied your proposed Dissertation Brief regarding "A Study of the Relationship Between Perceived Leadership Behavior and Teacher Morale in Catholic Schools in the Diocese of Richmond." We have no objections to your requesting assistance from the principals of the secondary schools in the Diocese of Richmond. I am, therefore, enclosing for your use a listing of the names and addresses of these schools.

You should know that several of these schools have already participated in outside research projects during this school year and they may feel that at the present time they are not interested in another project.

I wish you success and ask that you share the results of your research with me.

Sincerely,



Sister Lourdes Sheehan, R.S.M.  
Superintendent of Schools

hpd

Enclosure

## Appendix B

## Letter of Solicitation for Research

May 19, 1976  
1643 Monticello Street  
Petersburg, VA 23803

Dear

The Diocese of Richmond has granted me permission to conduct a research project for the completion of a dissertation entitled: "A Study of the Relationship Between Perceived Leadership Behavior and Teacher Morale in Catholic Secondary Schools in the Diocese of Richmond." (Description enclosed).

I am sending a copy of a letter from Sister Lourdes Sheehan, Superintendent of Schools, which provides authorization for the study. As she quite properly suggested, it is late in the school year and you are no doubt going to be extremely busy between now and school closing. It is for this reason that I would like to ask your permission to do the research during the 1976-1977 school year. My plan at this time is to do the data collection during November. It is envisioned that each teacher will be administered the Leadership Behavior Description Questionnaire (Halpin, 1957), the Purdue Teacher Opinionnaire (Bentley & Rempel), and the Organizational Questionnaire (Schuttenberg, 1972). The administration of these three instruments should consume no more than one hour and will be done at your convenience.

In extremely brief summary, the results of this project will enable you, the principal, to know how you are perceived by faculty members and how your leadership style is related to teacher morale in your school. It is important to note that your school will not be identified in any way and full anonymity for respondents will be guaranteed.

I would be very appreciative if you would return the enclosed postcard indicating your willingness to participate in this study and ask that you feel free to call me collect at (804) 733-4842 if you wish to discuss any aspect of the proposed study.

I sincerely appreciate your time in considering my research proposal.

Respectfully yours,

MITCHELL J. HARTSON



## Appendix C

## DESCRIPTION OF DISSERTATION

TITLE:

"A Study of the Relationships Between Perceived Leadership Behavior and Teacher Morale as Moderated by Teacher Perceptions of Organizational Output in the Catholic Secondary Schools of the Diocese of Richmond"

SIGNIFICANCE:

The description of the leader behavior of the school principal and its influence on the morale of teachers can help to provide meaningful feedback to the principal on the impact of her behavior. The verification of theories presented by researchers regarding the differential effects of leadership styles is an important product of applied research in the behavioral sciences.

PROBLEM:

To determine, on the basis of perceptual data collected from teachers, whether the leadership behavior of the principal is related to teacher morale while controlling for the moderating effect of teacher assessment of organizational output.

SCOPE:

This research is limited to a sample of twelve Catholic secondary schools located in the Diocese of Richmond.

METHOD:

A 50-60 minute meeting with faculty members in each of the participating secondary schools during which the following instruments will be administered:

- Leader Behavior Description Questionnaire (Halpin)
- Purdue Teacher Opinionnaire (Bentley and Hempel)
- Organizational Questionnaire (Schuttenberg)

RESULTS:

Empirical validation or rejection of the leadership theory which states that leader behavior can be conceived as having two components or style: consideration and initiating structure and that the style perceived is related to expressed teacher morale even while controlling for the effect of teacher assessment of organizational output.

## Appendix D

DEMOGRAPHIC  
DATA

School Number \_\_\_\_\_

Respondent Number \_\_\_\_\_

Date \_\_\_\_\_

Instructions: Please check the appropriate blank or enter data for each item listed below.

1. I have \_\_\_\_\_ years of teaching experience.

2. My sex is:

\_\_\_\_\_ a. Female

\_\_\_\_\_ b. Male

3. I am:

\_\_\_\_\_ a. a member of a religious order (sister, brother, etc.)

\_\_\_\_\_ b. a lay teacher

4. I am:

\_\_\_\_\_ a. Catholic

\_\_\_\_\_ b. Non-catholic

5. My age is \_\_\_\_\_ years.

6. The highest level of education I have achieved is:

\_\_\_\_\_ a. Bachelor degree

\_\_\_\_\_ d. Masters degree  
plus 30 hours

\_\_\_\_\_ b. Bachelor degree plus  
15 hours or more

\_\_\_\_\_ e. Doctorate

\_\_\_\_\_ c. Masters degree

Appendix E  
Authorization to Use Organizational Questionnaire  
CLEVELAND STATE UNIVERSITY  
CLEVELAND, OHIO 44115

118

COLLEGE OF EDUCATION

(216) 617-3737

October 12, 1976

Mr. Mitchell J. Hartson  
1643 Monticello Street  
Petersburg, Virginia 23803

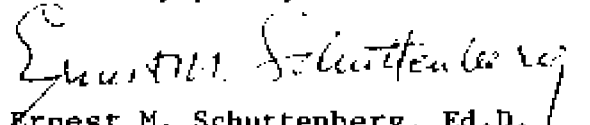
Dear Mr. Hartson:

Thank you for sending me your dissertation proposal and Addendum. It looks like an interesting study.

You have my permission to reproduce enough copies of The Organizational Questionnaire for use in your study. Attached is a copy of the OQ.

Please keep me informed regarding the progress and the outcome of your investigation.

Sincerely yours,

  
Ernest M. Schuttenberg, Ed.D.  
Associate Professor of Education  
Dept. of Educational Specialists

Attachment

## Appendix F

Acquisition of the Leader Behavior Description Questionnaire

The Leadership Behavior Description Questionnaire is a commercially published instrument. Copies of the instrument can be obtained by writing to the following address:

University Press  
The Ohio State University  
316 Hitchcock Hall  
2070 Niel Avenue  
Columbus, Ohio 43210

Purchase price at the time of this study was \$7.00 per 100 copies.

## Appendix G

Acquisition of the Purdue Teacher Opinionnaire

The Purdue Teacher Opinionnaire is a commercially published instrument. Copies of the instrument can be obtained by writing to the following address:

University Book Store  
360 State Street  
West Lafayette, Indiana 47906

Purchase price at the time of this study was \$20 per 100 copies.

## Appendix H

Table 15  
Individual Subject Scores on All Scales

Subject Number	Leadership Behavior	Consideration Behavior	Initiating Structure Behavior	Morale	Organizational Output
1	95	51	44	336	193
2	93	48	45	353	164
3	86	39	47	291	167
4	96	52	44	315	205
5	87	45	42	276	181
6	70	39	31	298	164
7	81	43	38	386	166
8	99	53	46	328	227
9	64	41	23	310	163
10	94	51	43	360	199
11	95	53	42	372	192
12	93	45	48	304	159
13	83	47	36	300	173
14	75	40	35	235	147
15	103	54	49	311	221
16	61	26	35	237	158
17	80	43	37	294	173
18	89	46	43	351	162
19	93	49	44	323	181

Table 15--Continued

Subject Number	Leadership Behavior	Consideration Behavior	Initiating Structure Behavior	Morale	Organizational Output
20	94	48	46	367	199
21	102	51	51	322	190
22	64	26	38	256	124
23	76	36	40	349	185
24	101	57	44	379	216
25	82	45	37	335	170
26	79	37	42	341	216
27	90	43	47	333	201
28	98	50	48	368	210
29	110	52	58	381	219
30	96	48	48	313	149
31	111	53	58	394	218
32	77	35	42	299	188
33	81	40	41	326	156
34	83	45	38	346	152
35	83	39	44	258	119
36	118	58	60	368	228
37	48	33	15	229	91
38	112	54	58	400	240
39	89	45	44	383	224
40	93	51	42	382	183
41	76	43	33	316	160

Table 15--Continued

Subject Number	Leadership Behavior	Consideration Behavior	Initiating Structure Behavior	Morale	Organizational Output
42	71	38	33	326	146
43	93	49	44	360	164
44	108	54	54	351	212
45	73	51	22	276	131
46	90	44	46	352	188
47	64	41	23	304	125
48	92	46	46	322	154
49	84	36	48	386	144
50	100	47	53	370	198
51	88	48	40	335	174
52	85	43	42	383	214
53	102	50	52	346	196
54	79	43	36	344	156
55	99	49	50	360	172
56	82	41	41	290	166
57	67	20	47	288	97
58	88	35	53	335	163
59	80	32	48	335	150
60	76	45	31	273	144
61	78	28	50	317	142
62	84	52	32	361	184
63	87	48	39	351	169



Table 15--Continued

Subject Number	Leadership Behavior	Consideration Behavior	Initiating Structure Behavior	Morale	Organizational Output
64	93	48	45	324	156
65	92	49	43	350	162
66	52	30	22	238	126
67	62	32	30	278	161
68	71	34	37	291	160
69	86	34	52	325	186
70	49	23	26	284	122
71	48	26	22	256	109
72	88	48	40	333	182
73	88	44	44	333	172
74	83	38	45	295	183
75	104	52	52	288	192
76	105	56	49	345	182
77	100	51	49	325	189
78	77	34	43	336	150
79	76	35	41	283	164
80	80	39	41	295	166
81	78	27	51	252	130
82	77	38	39	306	182
83	102	51	51	363	169
84	90	53	37	344	221
85	97	55	42	371	195

Table 15--Continued

Subject Number	Leadership Behavior	Consideration Behavior	Initiating Structure Behavior	Morale	Organizational Output
86	79	42	37	350	203
87	105	55	50	337	198
88	107	55	52	395	231
89	76	42	34	296	164
90	86	42	44	376	178
91	83	45	38	301	187
92	81	43	38	382	170
93	81	46	35	340	184
94	84	45	39	320	160
95	94	56	38	304	176
96	95	51	44	311	177

## References

- Anderson, L. W. Teacher morale and student achievement. Journal of Educational Research, 1953, 46, 202-211.
- Barnard, C. I. The functions of the executive. Cambridge, MA: Harvard University Press, 1938.
- Barnard, C. I. Organization and management. Cambridge, MA: Harvard University Press, 1948.
- Benathy, B. Instructional systems. Palo Alto, CA: Fearon Publishing Co., 1968.
- Bennis, W. Toward a truly scientific management: the concept of organizational health. General Systems, VIII, 1962, 13, 269-282.
- Bentley, R. R., & Rempel, A. M. A comparison of selected factors in schools where morale of vocational agriculture teachers is high with schools where morale is low. Studies in Education. Lafayette, IN: Purdue University Press, 1963.
- Bentley, R. R., & Rempel, A. M. Changing teacher morale: an experiment in feedback of identified problems of teachers and principals. Lafayette, IN: Purdue University Press, 1967.
- Bentley, R. R., & Rempel, A. M. Manual for the Purdue Teacher Opinionnaire. West Lafayette, IN: University Book Store, 1970.
- Bergeth, R. D. An experimental study of teacher morale in selected school districts of North Dakota. Unpublished doctoral dissertation, 1970. (ERIC Document Reproduction Service No. ED 042 561)
- Bernardin, J. H., & Alvares, K. Managerial grid as a predictor of conflict resolution method and managerial effectiveness. Bowling Green State University, 1971. (ERIC Document Reproduction Service No. ED 094 279)

- Bidwell, C. Administration and teacher satisfaction. Phi Delta Kappan, 1956, 37, 285-288.
- Blake, R., & Mouton, J. The managerial grid. Houston, Tx.: Gulf Publishing Company, 1964.
- Bowling, S. R. Leadership behavior of chief student personnel administrators and its relationship to morale and job satisfaction. Dissertation Abstracts International, 1974, 34, 4472-A.
- Buros, O. K. (Ed.). The seventh mental measurements yearbook. Highland Park, NJ: The Gryphon Press, 1972.
- Cawley, R. T. Leadership behavior of elementary school principals as perceived by their teachers and superordinates in the United States dependent schools. Dissertation Abstracts International, 1975, 35, 4750-A.
- Check, J. F. Dissatisfaction in teaching. The Educational Forum, 1971, 35, 173-175.
- Chung, K. Teacher-centered management style of principals and job satisfaction of teachers. Paper presented at the annual meeting of the American Educational Research Association, 1970. (ERIC Document Reproduction Service No. ED 042 259)
- Ciampa, B. A systems overview for the school administrator, 1975. (ERIC Document Reproduction Service No. ED 109 056)
- Cohn, E., & Millman, S. D. Management-oriented approaches to assess input-output relationships in secondary schools. Final Report, 1974. (ERIC Document Reproduction Service No. ED 093 056)
- Coughlan, R. J. Dimensions of teacher morale. American Educational Research Association Journal, 1970, 7, 221-234.

- Coughlan, R. J. A comparison between two standardized measures of teacher morale. Paper presented at the annual meeting of the American Educational Research Association, New York, 1971.  
(ERIC Document Reproduction Service No. ED 050 170)
- Cummins, R. C. Relationship of initiating structure and job performance as moderated by consideration. Journal of Applied Psychology, 1971, 55, 489-490.
- Davies, P. R., & Klein, C. E. Collective negotiations and teacher satisfaction in selected Indiana secondary schools. Paper presented at the annual meeting of the American Educational Research Association, March, 1973. (ERIC Document Reproduction Service No. ED 078 556)
- Davis, K. Morale and its appraisal. In Human Relations at Work. New York: McGraw-Hill Book Company, 1962.
- Dayton, C. M. The design of educational experiments. New York: McGraw-Hill Book Co., 1970.
- Dessler, G. Organization and management: a contingency approach. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1976.
- Dubin, R., Homans, G., Mann, F., & Miller, D. Leadership and productivity. San Francisco, CA: Chandler Publishing Co., 1965.
- Farquhar, R. H. The public school administrator views the Catholic school--or does he? Educational Administration Quarterly, 1968, 4, 2-15.
- Fayol, H. General and industrial management. Translated from the French edition by Constance Storrs. London: Sir Isaac Pittman and Sons, Ltd., 1949.
- Fiedler, F. E. A theory of leadership effectiveness. New York: McGraw-Hill Book Co., 1967.

- Filley, A. C., & House, R. J. Managerial process and organizational behavior. Glenview, IL: Scott, Foresman and Co., 1969.
- Fleishman, E. A. A leader behavior description for industry. In R. M. Stogdill & A. E. Coons, Leader behavior: its description and measurement. Columbus, Ohio: Ohio State University, Bureau of Business Research, 1957.
- Fleishman, E. A., & Harris, E. F. Patterns of leadership behavior related to employee grievances and turnover. Personnel Psychology, 1962, 15, 42-56.
- Fleishman, E. A., & Hunt, J. G. (Eds.). Current developments in the study of leadership. Carbondale, IL: Southern Illinois University Press, 1973.
- Fleming, R. A. Sr. The relationship between administrative behavior of the principal and the quality of multi-dimensional organizational output of schools as assessed by teachers and administrators of Catholic elementary and secondary schools. Unpublished doctoral dissertation, Miami University, 1974. Ann Arbor: University Microfilms, 1974.
- Follettie, J. R. Educational productivity and the instructional systems process. February, 1972. (ERIC Document Reproduction Service No. ED 058 761)
- Gates, P., Blanchard, K., & Hersey, P. Diagnosing educational leadership problems: a situational approach. Educational Leadership, 1970, 90, 348-351.
- Getzels, J., Lipham, J., & Campbell, R. Educational administration as a social process. New York: Harper and Row, 1969.
- Ghiselli, E. E. The validity of management traits related to occupational level. Personnel Psychology, 1963, 16, 109-113.

- Gibb, C. Leadership. In Handbook of social psychology (Vol. 2).  
Boston: Addison Wesley, 1954.
- Gibson, R. O., & Hunt, H. C. The school personnel administrator.  
Boston: Houghton-Mifflin Co., 1967.
- Gramenz, G. W. Relationships of principal leader behavior and organizational structure of ICE/MUS-E to I and R unit effectiveness.  
Technical Report No. 320. University of Wisconsin, 1974. (ERIC Document Reproduction Service No. ED 102 644)
- Greene, C. N. The reciprocal nature of influence between leader and subordinate. Journal of Applied Psychology, 1975, 60, 187-193.
- Greenfield, T. B., & Andrews, J. H. M. Teacher leader behavior.  
Alberta Journal of Educational Research, 1961, 7, 92-102.
- Halleck, J. Educational costs and productivity. Paper presented at the International Institute for Educational Planning, Paris, France, 1967. (ERIC Document Reproduction Service No. ED 053 443)
- Halpin, A. H. The leader behavior of school superintendents. Columbus: The Ohio State University Press, 1956.
- Halpin, A. W. Studies in air crew composition. X. The combat leadership style of B-29 aircraft commanders. Technical Report. Human Factors Operations Research Laboratories, August, 1953.
- Halpin, A. W. The leadership behavior and combat performance of aircraft commanders. Journal of Abnormal and Social Psychology, 1954, 1, 19-22.
- Halpin, A. W. The leader behavior and effectiveness of aircraft commanders. In R. M. Stogdill & A. E. Coons, Leader behavior: its description and measurement. Columbus: Ohio State University Press, Bureau of Business Research, 1957.

- Halpin, A. W. Manual for the Leader Behavior Description Questionnaire. Columbus, Ohio: Ohio State University Press, Bureau of Business Research, 1957.
- Hammer, T. H., & Dachler, P. H. The process of supervision in the context of motivation theory. University of Maryland, 1973. (ERIC Document Reproduction Service No. ED 079 576)
- Hanes, C. F., & Forbes, J. K. Factors predicting educational productivity. Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., 1975. (ERIC Document Reproduction Service No. ED 103 978)
- Hayman, J. L. The systems approach and education. The Educational Forum, 1974, 38, 493-501.
- Hemphill, J. Leadership behavior associated with the administrative reputation of college departments. Journal of Educational Psychology, 1955, 46, 385-401.
- Herold, D. M. Interaction of subordinate and leader characteristics in moderating the consideration-satisfaction relationship. Journal of Applied Psychology, 1971, 55, 649-651.
- House, R. J. A path-goal theory of leadership effectiveness. Administrative Science Quarterly, 1971, 16, 321-338.
- House, R. J., & Dessler, G. The path-goal theory of leadership: some post-hoc and a priori tests. Paper presented at the Second Leadership Symposium: Contingency Approaches to Leadership, Southern Illinois University, 1973.
- Huffman, B. J. Militancy among Catholic lay teachers. Paper presented at the annual meeting of the American Educational Research Association, Chicago, Illinois, 1974. (ERIC Document Reproduction Services No. ED 090 660)



- Hunt, J. G., & Larson, L. L. Leadership frontiers. Kent State University: Kent State University Press, 1975.
- Immegart, G., & Pilecki, F. J. Assessing organizational output: a framework and some implications. Educational Administration Quarterly, Winter, 1969, 62-76.
- Jacobs, T. O. Leadership and exchange in formal organizations. Washington, D.C.: Human Resources Research Organization, 1970.
- Jury, P., Weitzel, W., Davis, R., & Pinto, P. The relationship of sample demographic characteristics to job satisfaction. University of Minnesota, 1971. (ERIC Document Reproduction Service No. ED 052 367)
- Katz, D., & Kahn, R. L. The social psychology of organizations. New York: John Wiley & Sons, 1966.
- Keeler, B. T., & Andrews, J. H. M. Leader behavior of principals, staff morale and productivity. Alberta Journal of Educational Research, 1963, 2, 179-191.
- Kerlinger, F. N. Foundations of behavioral research. New York: Holt, Rinehart & Winston, 1973.
- Kerr, S., Schreisheim, C. A., Murphy, G. J., & Stogdill, R. M. Toward a contingency theory of leadership based upon the consideration and initiating structure literature. Organizational Behavior and Human Performance, 1974, 12, 62-82.
- Kiesling, H. J. Educational productivity: public concern and legislative response. National Conference of State Legislatures, Washington, D.C., 1975. (ERIC Document Reproduction Service No. ED 112 517)
- Knezevich, S. J. Administration of public education (2nd ed.). New York: Harper & Row, 1969.

- Knowles, M. S. The modern practices of adult education: andragogy vs. pedagogy. New York: The Association Press, 1970.
- Koob, A., & Shaw, R. S. O. S. for Catholic schools: a strategy for future service to church and nation. New York: Holt, Rinehart & Winston, 1970.
- Korman, A. K. Consideration, initiating structure, and organizational criteria. Personnel Psychology, 1966, 18, 349-360.
- Laird, R. E. The relationship of the leader behavior of the principal and teacher morale in the vocational centers of Maryland. Dissertation Abstracts International, 1974, 35, 3589-A.
- Lake, D. G., Miles, M. B., & Earle, R. B. Jr. Measuring human behavior: tools for the assessment of social functioning. New York: Teachers College Press, 1973.
- Latham, J. I. Human relations in business: a behavioral science approach. Columbus, Ohio: Charles E. Merrill Books, Inc., 1966.
- Likert, R. New patterns of management. New York: McGraw-Hill Book Co., 1961.
- Locke, E. A. What is job satisfaction? Speech presented at the American Psychological Association Convention, 1968. (ERIC Document Reproduction Service No. ED 023 138)
- Mackenzie, G. N., & Corey, S. M. Ways of exercising in school situations. In Instructional leadership. New York: Bureau of Publications, Teachers College, Columbia University, 1954.
- Miles, M. B. Changes during and following laboratory training: a clinical experimental study. Journal of Applied Behavioral Science, 1965, 1, 215-252.

- Miller, W. C. Can a principal's improved leadership behavior result in higher student achievement? Educational Leadership, 1976, 33, 336-338.
- Miner, J. B., & Miner, M. G. Personnel and industrial relations (2nd ed.). New York: The Macmillan Company, 1973.
- Morphet, E. L., Johns, R. L., & Reller, T. L. Educational administration. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1959.
- Moser, R. P. The leadership patterns of school superintendents and school principals. Administrator's Notebook, 1959, 6, 1-4.
- Netzer, L. A., Eye, G., Graef, A., Krey, R., & Overman, J. F. Interdisciplinary foundations of supervision. Boston: Allyn & Bacon, Inc., 1970.
- Nie, N., Hull, C. H., Jenkins, J., Steinbrenner, K., & Bent, D. Statistical package for the social sciences (2nd ed.). New York: McGraw-Hill Book Company, 1975.
- Oaklander, H., & Fleishman, E. A. Patterns of leadership to organizational stress in hospital settings. Administrative Science Quarterly, 1964, 8, 520-532.
- Optner, S. L. Systems analysis for business management. Englewood Cliffs, NJ: Prentice-Hall, 1960.
- Peterson, R. B. Teacher attitudes toward professionalism, job satisfaction, and collective negotiations: a cross-cultural study. Final Report, 1972. (ERIC Document Reproduction Service No. ED 063 279)
- Petty, M. M., & Lee, G. K. Moderating effects of sex of supervisor and subordinate on relationships between supervisory behavior and subordinate satisfaction. Journal of Applied Psychology, 1975, 60, 624-628.

- Plude, F. F. The flickering light: what's happening to the Catholic schools? New York: William H. Sadler Company, 1974.
- Quinn, R., Staines, G., & McCullough, M. Job satisfaction: is there a trend? Manpower Research Monograph No. 30. U.S. Department of Labor. (ERIC Document Reproduction Service No. ED 090 374)
- Richardson, R. C., & Blocker, C. E. Note on the application of factor analysis to the study of faculty morale. Journal of Educational Psychology, 1963, 54, 208-212.
- Riles, W. Educational leadership in an era of accountability. Paper presented at the annual meeting of the American Educational Research Association, Washington, D.C., 1975. (ERIC Document Reproduction Service No. ED 106 941)
- Rogers, C. W. Freedom to learn. Columbus, Ohio: Merrill Publishing Company, 1969.
- Sartain, A., North, A., Strange, J., & Chapman, H. Psychology: understanding human behavior (2nd ed.). New York: McGraw-Hill Book Company, 1962.
- Schuttenberg, E. M. The development of a general-purpose organizational output instrument and its use in the analysis of an organization. Unpublished doctoral dissertation, Boston University, 1972. Ann Arbor: University Microfilms, 1972.
- Sergiovanni, T. J., & Carver, F. D. The new school executive. New York: Dodd, Mead and Company, 1973.
- Stogdill, R. M. Individual behavior and group achievement. New York: Oxford University Press, 1959.
- Stogdill, R. M. Handbook of leadership. New York: The Free Press, 1974.

- Stogdill, R. M., & Coons, A. S. Leader behavior: its description and measurement. Bureau of Business Research. Columbus, Ohio: Ohio State University Press, 1957.
- Stogdill, R. M., & Shartle, C. L. Patterns of administrative performance. Columbus, Ohio: Ohio State University, Bureau of Business Research, 1956.
- Straub, R. R. The perceptions of the leadership behavior of the director of area vocational-technical schools in Pennsylvania. Dissertation Abstracts International, 1974, 34, 4658-A.
- Swanson, R. G., & Johnson, D. A. Relation between peer perception of leader behavior and instructor pilot performance. Journal of Applied Psychology, 1975, 60, 198-199.
- Tannenbaum, R., & Schmidt, W. H. How to choose a leadership pattern. Harvard Business Review, 1958, 36, 95-101.
- The Catholic Virginian. October 13, 1976. Richmond, Virginia: The Catholic Virginian Press.
- Tucker, B. M. Consideration, initiating structure, and leadership in industry. Dissertation Abstracts International, 1973, 34, 2839-A.
- Vroom, V. H. Work and motivation. New York: John Wiley & Sons, 1964.
- Vroom, V. H., & Yetton, P. W. Leadership and decision-making. Pittsburgh, PA: University of Pittsburgh Press, 1973.
- Wagner, W. C. A study of leader behavior of college administrators. Dissertation Abstracts International, 1974, 34, 5559-A.
- Weed, S. E., Mitchell, T., & Moffitt, W. Leadership style, subordinate personality and task type as predictors of performance and satisfaction with supervision. Journal of Applied Psychology, 1976, 61, 58-66.

- Wood, D. A., & Lebold, W. K. The multi-variate nature of professional job satisfaction. Paper presented at the Annual Conference of the Indiana Manpower Research Association, 1967. (ERIC Document Reproduction Service No. ED 023 578).
- Yamada, P. S. Teacher's and principal's perceptions of leadership role of the Catholic parochial elementary school principals in schools with and without a negotiated contract. Dissertation Abstracts International, 1974, 34, 4673-A.
- Yuskiewicz, V. D., & Donaldson, W. S. Job satisfaction of the public school teacher: a function of sub-culture consensus with respect to pupil-control ideology. Paper presented at the meeting of the American Educational Research Association, April, 1966. (ERIC Document Reproduction Service No. ED 061 178)

A STUDY OF THE INTERRELATIONSHIPS AMONG PERCEIVED  
LEADER BEHAVIOR OF PRINCIPALS, ASSESSMENTS OF  
ORGANIZATIONAL OUTPUT AND TEACHER MORALE IN  
THE SECONDARY SCHOOLS OF THE ROMAN  
CATHOLIC DIOCESE OF RICHMOND

Mitchell James Hartson, Ed.D.  
The College of William and Mary in Virginia, 1978

Chairman: Professor Armand J. Galfo

Purpose

The purpose of the study was to investigate the interrelationships among teacher perceptions of leadership behavior of their principals, their morale and assessments of school output. Two hypotheses based on previous research predicted that teachers having the highest morale and assessments of school output would perceive their principal's leader behavior as belonging to the "high-consideration/high-initiating structure" quadrant of the Ohio State Leadership theory. The third hypothesis predicted a significant relationship between perceived leadership behavior and teacher morale while controlling for teacher assessments or organizational output. The final hypothesis sought to confirm previous research which suggests that different status groups within the school population may see leadership behavior in significantly different ways. The theoretical basis for the study was the Ohio State leadership studies conducted by Stogdill, Coons, and Halpin.

Method

In this descriptive study, leadership behavior was measured by use of the Leader Behavior Description Questionnaire. The two dimensions of leadership behavior were transformed to construct four distinct leadership styles based on combinations of the two dimensions. After teacher perceptions of leadership behavior were determined, teacher morale was measured by use of the Purdue Teacher Opinionnaire. Teacher assessments of the organizational output of their schools was measured using the Organizational Questionnaire. Hypotheses were tested by using analysis of variance, analysis of covariance, and partial correlation analysis.

Findings and Conclusions

Results supported Hypotheses 1 and 2 that leadership behavior described as "high-consideration/high-initiating structure" results in the highest measures of teacher morale and assessments of school output. The conclusion is that previous research resulting in this finding is replicated in the context of Catholic schools. The present study demonstrates that the perceptions teachers have of their principals' leadership behavior does influence their morale and the extent to which they see their schools as meeting institutional objectives. Hypothesis 3 demonstrates that the relationship between perceived principal leader behavior and teacher morale is moderated by teacher assessments of the output of their schools. The conclusion is that it is important to the teachers that their schools serve some worthwhile social purpose. The religious or lay status of the teacher affected perceptions of leadership behavior. Lay teachers saw principals' behavior as more considerate and more task-oriented than did their religious counterparts. The conclusion is that the leader must understand that behavior can be perceived differently by various groups within the teaching population.

VITA

Mitchell James Hartson

Born in Gouverneur, New York, January 20, 1943.

Attended Ithaca College, Ithaca, New York, 1961-1962.

Attended the State University of New York at Oswego, Oswego, New York, 1962-1965. Awarded Bachelor of Science degree in Secondary Education, 1965.

Attended the College of William and Mary in Virginia, Williamsburg, Virginia, 1968-1978. Awarded the Master of Education degree in Supervision, 1971. Awarded Certificate of Advanced Graduate Study in Educational Administration, 1976. Candidate for the degree Doctor of Education in Educational Administration, 1978.