Effectiveness in urban elementary schools as a function of the interaction between leadership behavior of principals and maturity of followers.

Mary J. Smith
University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/dissertations_1

Recommended Citation
https://scholarworks.umass.edu/dissertations_1/3013

This Open Access Dissertation is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Doctoral Dissertations 1896 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
EFFECTIVENESS IN URBAN ELEMENTARY SCHOOLS AS A FUNCTION OF THE INTERACTION BETWEEN LEADERSHIP BEHAVIOR OF PRINCIPALS AND MATURITY OF FOLLOWERS

A Dissertation Presented

By

Mary J. Smith

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the degree of DOCTOR OF EDUCATION

December 1974

Major Subject: Educational Leadership
EFFECTIVENESS IN URBAN ELEMENTARY SCHOOLS AS A
FUNCTION OF THE INTERACTION BETWEEN
LEADERSHIP BEHAVIOR OF PRINCIPALS
AND MATURITY OF FOLLOWERS

A Dissertation

By

Mary J. Smith

Approved as to style and content by:

Dr. Kenneth H. Blanchard, Chairman of Committee

Dr. David G. Coffing, Member

Dr. David S. Flight, Member

Dr. John W. Wideman, Member

Dean

School of Education

December 1974
ACKNOWLEDGEMENTS

The writer sincerely acknowledges the valuable assistance of many people who made this study possible. Deep appreciation is expressed to Dr. Kenneth H. Blanchard for serving as chairman of her doctoral committee and providing the inspiration for this investigation of the Hersey and Blanchard Life Cycle Theory of Leadership. Genuine gratitude is extended to him and the other committee members--Dr. David G. Coffing, Dr. David S. Flight, and Dr. John W. Wideman--for their skillful technical assistance and continuing support and guidance throughout the doctoral program and the critical stages of the study.

The writer acknowledges also the cooperation of the Louisville Public School System--especially Dr. Newman M. Walker, Superintendent; the Department of Research and Evaluation; the Department of Employee Personnel; and the principals and staffs participating in the study.

The writer wishes to mention her indebtedness to Mrs. Rose Banks, Dr. Barbara Love, and Dr. Dwight Allen for their constant encouragement and support. In addition, thanks go to Bill Welch for assistance in programming, and to typists, Tessabell Booker and Elizabeth Everett, who performed many tasks so essential to the completion of the study.

Finally, the writer expresses her thanks to her children, Kevin and Nannette, whose patience, understanding, and help made everything possible.
ABSTRACT

Effectiveness in Urban Elementary Schools as a Function of the Interaction Between Leadership Behavior of Principals and Maturity of Followers

(December 1974)

Mary J. Smith, B.A., Fisk University

M.A., Columbia University

Directed by: Dr. Kenneth H. Blanchard

The purpose of the study was to examine the interaction between perceived leader behavior and follower maturity as they relate to effectiveness in urban elementary schools. Leader behavior was considered to be a two-dimensional variable consisting of task-oriented and relationships-oriented behavior. Maturity was defined as consisting of two dimensions—time competence and inner-directed support or independence—but was treated as a single dimension variable with only one of the dimensions being examined at a given time. Effectiveness was considered to encompass two broad dimensions each of which was further subdivided as follows: (1) end result variables, comprised of total reading achievement scores from Kindergarten through grade six and scores of students in a newly implemented Diagnostic-Prescriptive-Individualized Reading Program; and (2) intervening variables, comprised of student attitudes about school and teacher job satisfaction. The interactional model of leadership effectiveness used in the study was proposed by Hersey and Blanchard in their Life Cycle
Theory of Leadership. To more clearly define the relationship of the primary variables under investigation, other situational variables (traditional predictor variables) were also examined.

Principals and staffs of eight Title I elementary schools in Louisville, Kentucky, participated in the study. Of 363 sets of questionnaires sent out 274 or seventy-five percent were returned. Three research instruments were used: the Leader Behavior Description Questionnaire (to identify the behavior of the leader as perceived by his followers), the Personnel Orientation Inventory (to determine follower maturity), and a Demographic Data Sheet (to identify other situational variables). Data for measuring effectiveness were provided by the Department of Research and Evaluation and the Department of Employee Personnel of the Louisville Public School System. The two major statistical techniques used for analysis were the t-Test and Regression.

When the time-competent dimension of maturity was examined, the data indicated a significant (p<.05) positive correlation between: (1) effectiveness and high task-oriented, low relationships-oriented leader behavior when the followers were of below average maturity; and (2) effectiveness and either high or low task-oriented, high relationships-oriented leader behavior when the followers were of average maturity. No significant correlations of the suggested interaction and effectiveness were evident when the independent dimension of maturity was examined. Independence was not considered in the
additional analyses. Unavailability of appropriate leader/follower groups eliminated tests of the interaction between perceived low-task oriented, low relationships-oriented leader behavior and followers of above average maturity.

Using stepwise regression of time competence, task, and relationships as related to effectiveness, a RSQ of .84 was reached. Through forcing the entry of the three primary predictor variables and allowing traditional predictors to enter by the stepwise option, the explanation of variance accounted for reached .99. The directions of the relationships were as predicted in the accepted hypotheses and as suggested in the Life Cycle Theory for the level of maturity present in the study.

It seems advisable then that urban school systems make appropriate applications of the Life Cycle Theory in the selection, pairing, and training of elementary principals and staffs. In further investigations of the interaction of leader behavior and follower maturity there is a need to examine each of the maturity dimensions and to analyze the relationships between them. It is also recommended that consideration be given to determining follower maturity through an assessment of the individual members' perception of the group maturity level.
# TABLE OF CONTENTS

## CHAPTER

<table>
<thead>
<tr>
<th>I. INTRODUCTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Background</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>1</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>6</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>6</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>7</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>10</td>
</tr>
<tr>
<td>Organization of the Study</td>
<td>12</td>
</tr>
<tr>
<td>Variables Used in the Study</td>
<td>12</td>
</tr>
<tr>
<td>Summary Listing of Variables</td>
<td>13</td>
</tr>
<tr>
<td>Hypotheses of the Study</td>
<td>14</td>
</tr>
</tbody>
</table>

| II. REVIEW OF THE LITERATURE | 18 |
| Early Leadership Studies | 18 |
| Studies of Leadership Dimensions | 20 |
| Situational Leadership | 28 |
| Review of Management Theories | 32 |

| III. PROCEDURES | 42 |
| Research Site | 42 |
| Subject Population | 43 |
| Procedures for Implementing the Study | 44 |
| Instrumentation | 46 |
| Data Collection | 49 |

| IV. RESULTS | 53 |
| Presentation of Data | 53 |
| Correlational Data | 68 |
| Tests of the Hypotheses | 71 |
| Traditional Predictor Variables | 74 |

| V. SUMMARY AND CONCLUSIONS | 80 |
| Introduction | 80 |
| Procedures | 82 |
| Results | 83 |
| Conclusions | 85 |
| Limitations | 87 |
| Recommendations | 88 |

REFERENCES | 90 |

APPENDIX A | 94 |

APPENDIX B | 115 |
LIST OF ILLUSTRATIONS

FIGURE          PAGE
1. Life Cycle Theory of Leadership               4
2. Maturity levels                                 5
3. Optimum effective leader behavior curve        17
4. Classification of leadership functions         21
5. Continuum of Leadership Behavior               23
6. Examples of items from Likert's table of
   organizational and performance characteristics
   of different management systems                24
7. The Ohio State leadership quadrants            26
8. The Managerial Grid leadership styles          27
9. Interacting components of an organizational setting 29
10. Maslow's hierarchy of needs                   35
11. List of assumptions about nature of man
    which underline McGregor's Theory X and
    Theory Y                                       36
12. Immaturity/Maturity continuum                  38
13. Motivation and hygiene factors                39
14. The design of data collection                  52
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Summary of Questionnaire Returns by Schools</td>
<td>50</td>
</tr>
<tr>
<td>2. Means of Leader Behavior Description Questionnaire</td>
<td>55</td>
</tr>
<tr>
<td>3. Means of Personal Orientation Inventory</td>
<td>57</td>
</tr>
<tr>
<td>4. Means of Reading Achievement Data</td>
<td>60</td>
</tr>
<tr>
<td>5. Means of Climate Data</td>
<td>61</td>
</tr>
<tr>
<td>6. Summary of Criterion Variables</td>
<td>62</td>
</tr>
<tr>
<td>7. Standardized Scores of Criterion Variables by Categories and Total Effectiveness</td>
<td>64</td>
</tr>
<tr>
<td>8. Total Effectiveness Classification</td>
<td>65</td>
</tr>
<tr>
<td>9. Means of Traditional Predictor Variable Data</td>
<td>66</td>
</tr>
<tr>
<td>10. School Profiles</td>
<td>67</td>
</tr>
<tr>
<td>11. Correlation Matrix of Total List of Variables</td>
<td>69</td>
</tr>
<tr>
<td>12. Correlation Matrix of Total List of Significant Variables</td>
<td>70</td>
</tr>
<tr>
<td>13. t-Test</td>
<td>73</td>
</tr>
<tr>
<td>14. t-Test</td>
<td>75</td>
</tr>
<tr>
<td>15. Stepwise Regression Predictions of Effectiveness from Primary Predictor Variables</td>
<td>76</td>
</tr>
<tr>
<td>16. Stepwise Regression Predictions of Effectiveness from Primary Predictor Variables and Traditional Predictor Variables</td>
<td>78</td>
</tr>
<tr>
<td>17. Stepwise Regression Predictions of Effectiveness from Primary Predictor Variables (Forced) and Traditional Predictor Variables</td>
<td>79</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Man's concern with leadership is as old as his recorded history. Inquiries into leadership characteristics, leadership training, leadership functions, and leadership effectiveness have gained increasing momentum during the last fifty years. However, conflicting theories and evidence exist in sufficient quantity to make inconclusive the results that such research has produced.

General Background

Fiedler (1967) cited three problems that have plagued researchers in the area of leadership:

1. The difficulty of finding a large sample of comparable cases.
2. The complexities of leadership phenomena and the correspondingly complex statistical interactions.
3. The lag between leadership research and leadership theory.

An additional plague, the lag between leadership theory and application, cannot be overlooked.

One emerging view of leadership (Cartwright & Zander, 1968) stresses performance of needed functions and adaptability to changing situations. This view identifies sensitivity to changing conditions of groups and flexibility in behavior as essential ingredients of effective
leadership. Determinations are being made by current theorists of
the specific circumstances under which various leader behaviors are
most effective. The process of making the determinations involves
a classification of leadership behaviors, a classification of leadership
situations, and a matching of leadership behaviors to leadership
situations. Lawrence and Lorsch (1970) characterized the undertaking
of such research as an attempt to throw "light on the practical pro-
blems of administration[p. 2]."

Fiedler (1971) used the term interactional theories to describe
leadership models that recognize situational factors as well as leader-
ship variables. Fiedler's model, the Contingency Model of Leader-
ship Effectiveness, is an "explicit statement of how the leader's at-
tributes and the situation interact [p. 10]." Fiedler's model relates
two leader motivational patterns to three specific categories of leader-
ship situations.

Other recent writers proposing models for the interaction of
leadership variables and situational factors were Mann (1965), who
matched four important leadership skills with the leader's position in
the organization; Katz and Kahn (1965), who in a similar manner re-
lated leadership requirements to the level of operation in the organiza-
tion; and Hersey and Blanchard (1969, 1972), who associated effective
leader behavior with the life cycle of the group. The Life Cycle
Theory was examined by David Ducharme (1970) in his study of
elementary school teachers in Toronto, Canada. Ducharme's findings and recommendations have been utilized in the present investigation of the Hersey and Blanchard model.

The Life Cycle Theory of Leadership (Hersey and Blanchard, 1972) postulates that

as the level of maturity of one's followers continues to increase, appropriate leader behavior not only requires less and less structure (task) while increasing consideration, but should eventually entail decreases in socio-emotional support (relationships) [p. 134].

Figure 1 shows the suggested relationships between follower maturity and the two dimensions of leader behavior. As noted in the section Definition of Terms, maturity as used in the Life Cycle Theory refers to psychological age rather than chronological age.

Degrees of maturity can be approximated by dividing the maturity continuum of the Life Cycle into three levels, delineating below average, average, and above average maturity as shown in Figure 2. The Life Cycle Theory of Leadership (Hersey and Blanchard, 1972) suggests that

when working with people of below average maturity, a high task style (quadrant 1) has the best probability of success; whereas in dealing with people of average maturity, the styles of quadrants 2 and 3 appear to be most appropriate; and quadrant 4 has the highest probability of success with people of above average maturity [p. 143].
Fig. 1. Life Cycle Theory of Leadership (Hersey & Blanchard, 1972, p. 135).
Fig. 2. Maturity levels (Hersey & Blanchard, 1972, p. 142).
Statement of the Problem

The problem identified for examination in this study can be stated as follows: What are the identifiable, perceived behaviors of leaders which, when related to identifiable situational variables, are found to be effective? (Effectiveness is defined later in this Chapter.) The primary situational variable identified in this study is follower maturity. The secondary situational variables are classed as traditional predictor variables and include age, sex, race, education, position, certification, years of experience in position, and length of time at sample school. It is important to note that while the Hersey and Blanchard definition of maturity includes task relevant education and experience, the present study has classified them as traditional predictor variables based on Ducharme's findings of no significant relations and his recommendation that the individual components of maturity be examined separately (1970).

Purpose of the Study

The intent of the study has been to investigate the identified problem through research in an urban school system. An attempt was made to:

1. Categorize the perceived behavior of leaders (elementary school principals) as determined by the Leader Behavior Description Questionnaire (Halpin, 1959).
2. Measure the maturity level of their followers (building staff) as determined by the Personal Orientation Inventory (Shostrum, 1968).

3. Determine the effectiveness of participating schools as demonstrated by (a) reading achievement scores, (b) teacher job satisfaction, and (c) student attitudes about schools.

4. Examine school effectiveness as it relates to the interaction between perceived leader behavior and follower maturity.

5. Examine school effectiveness as it relates to the interaction between perceived leader behavior and traditional predictor variables.

Definition of Terms

Leader. The appointed principal of a designated building was considered the leader for purposes of this study.

Followers. The staff of the designated building was limited in this study to certified teachers, the librarian, the counselor, clerks, and paraprofessionals with specific instructional responsibilities.

Task-oriented behavior. Hersey and Blanchard (1972) define task behavior as

the extent to which a leader is likely to organize and define the roles of the members of his group (followers); to explain what activities each is to do
and when, where, and how tasks are to be accomplished; characterized by endeavoring to establish well-defined patterns of organization, channels of communication, and ways of getting jobs accomplished [pp. 82-83].

For purposes of this study, the term behavior was used to refer to the leader's behavior as perceived by his followers.

**Relationships-oriented behavior.** Hersey and Blanchard (1972) define relationships behavior as

the extent to which a leader is likely to maintain personal relationships between himself and the members of his group (followers) by opening up channels of communication, delegating responsibility, giving subordinates an opportunity to use their potential; characterized by socio-emotional support, friendship, and mutual trust [p. 83].

In this study the term behavior was used to refer to the leader's behavior as perceived by his followers.

**Maturity.** Hersey and Blanchard (1972) define maturity as a function of

achievement motivation (McClelland, Atkinson, Clark, and Lowel, 1953, 1961), the willingness and ability to take responsibility, and task relevant education and experience of an individual or a group [p. 134].

Recognizing the consistency of Hersey and Blanchard's definition with the ideas of Abraham Maslow (1954), Chris Argyris (1957), and Carl Rogers (1951, 1961), this study defines maturity as the degree of self-actualization measured along two dimensions--time competence and inner-directed support (independence).
**Time competence.** Everett Shostrom (1968), defines time competence as orientation primarily "to the present." The time competent person is able to tie the past and the future to the present in meaningful continuity. He appears to be less burdened by guilt, regret, and resentment from the past than is the non-self-actualized person, and his aspirations are tied meaningfully to present working goals. He has faith in the future without over-idealistic goals [p. 15].

**Inner-directed support.** Shostrom (1968) defines inner-directed support as orientation toward self. The inner-directed person apparently has a psychic "gyroscope" which is started by parental influences and later on is further influenced by other authority figures. The inner-directed man goes through life apparently independent, but still obeying this internal piloting. ... The source of direction for the individual is inner in the sense that he is guided by internal motivations rather than external influences. ... The support orientation of the self-actualizing person tends to be between that of the extreme other and the extreme inner-directed person. ... Whereas he is other-directed in that he must to a degree be sensitive to people's approval, affection, and goodwill, the source of his actions is essentially inner-directed [p. 17].

**Effectiveness.** Likert (1967) defines effectiveness as a function of end-result variables (productivity) and intervening variables (climate, morale, and job satisfaction). In this study, end-result variables are defined as the reading achievement of total school population and special reading program population. Intervening variables are defined as student attitudes about school and teacher
Significance of the Study

While the implications of this theory are far-reaching for increased effectiveness in a variety of organizations at both the formal and informal level, the investigator's primary concern was with the implications for increasing the effectiveness of the formal leader in public school systems in urban areas. Rising dropout rates; declining scores on achievement tests; growing alienation among students, staff, and community; and the exodus of middleclass families to the suburbs present an increasingly complex problem which taxes the technical, conceptual, and human skills of concerned educators at every level. Attempts to reverse the present trends are evident in the constant stream of educational innovations, varying from minor modifications of existing school programs to the establishment of totally new structures which serve as alternatives to public school education as it has heretofore been perceived.

National recognition of the magnitude of the problem and the inadequacy of local and state resources for dealing effectively with it was symbolized by the enactment of federal legislation in 1965, the Elementary and Secondary Education Act. Title I of the Act provides for special educational programs to meet the special educational needs
of educationally disadvantaged children residing in economically
disadvantaged attendance areas.

Crucial to all the ensuing change-efforts has been more effective
utilization of existing personnel in local school systems. Granted the
recruitment of desired new staff members, granted the potential of
improved pre- and in-service training programs, unless systems are
in the process of being newly formed or can somehow effect a stop-
action period while the above mentioned processes are taking place,
there remains the necessity of maximizing the effectiveness of
existing personnel with a minimum of time lag and for many systems
a minimum amount of financial support. The Life Cycle Theory of
Leadership suggests to the investigator three possible courses of
action:

1. Identification and use of leaders with a high degree of
   style adaptability in a variety of situations.

2. Deliberate pairing of leaders with obviously different
   styles to form a leadership team with a wide range
   of behaviors suitable in a variety of situations.

3. Deliberate fitting of leaders exhibiting obviously dominant
   styles with corresponding followers as suggested in the
   model.

This study was conceptualized as contributing toward the reduction
of the gap between current leadership theory and leadership research.
Practical application, hopefully, will follow.

Limitations of the Study

Certain limitations of the study were recognizable from the beginning. First, the investigation did not take place over time. The relationship between effectiveness and perceived leader behavior—follower maturity was determined by investigating different sets of followers, functioning at varying levels of maturity, rather than by pursuing any given group through all the postulated stages. Second, it was not expected that a large number of subjects would be found who were functioning at an above average level of maturity. Third, because of the selection process used, size of sample population, and number of groups involved, generalizability of the results are limited.

Organization of the Study

Chapter I presents a statement of the general background and nature of the problem; the purpose, significance, limitations, and organization of the study; a definition of the terms used; and a statement of the hypotheses tested.

Chapter II consists of an overview of the literature relating to the study of leadership. For convenience the literature is divided into four main bodies: (a) Early Leadership Studies, (b) Studies of Leadership Dimensions, (c) Situational Leadership, and (d) A Review of Management Theories.
Chapter III defines the procedures used in implementing the study. It includes the description and selection of the research site, subject population, instrumentation, and data collection.

Chapter IV consists of the presentation and analysis of the data collected for total population and subgroups. The hypotheses are tested and the relationships between the variables of the hypotheses and the traditional predictor variables are examined.

Chapter V presents a summary of the data, conclusions derived from the study, additional limitations of the study, and recommendation for further research.

Variables Used in the Study

**Predictor variables (leaders)**

1. Behavior
   a) Task
   b) Relationships

**Predictor variables (followers)**

1. Maturity
   a) Time competence
   b) Inner-directed support

2. Sex

3. Race

4. Chronological Age

5. Educational Level
6. Position

7. Certification

8. Years of experience in position

9. Length of time at sample school

10. Staff size

**Criterion variables**

1. Productivity as determined by school system's data on the following:
   
a. Mean reading scores of students from kindergarten through grade six.
   
b. Mean DPI reading scores, grades one through three.

2. Climate and morale as determined by school system's data on the following:
   
a. Teacher job satisfaction (resignations, retirements, and transfer requests to and from sample schools)
   
b. Student attitudes about school (attendance, tardiness, suspensions, delinquency referrals, and vandalism)

3. Total effectiveness (total of the four categories of criterion variables)

   **Summary Listing of Variables**

1. Task

2. Relationship

3. Time Competence
4. Inner-directed Support
5. Sex
6. Race
7. Age
8. Educational Level
9. Position
10. Certification
11. Experience
12. School Time
13. Staff Size
14. Total Reading
15. DPI Reading
16. Total Student Attitudes
17. Total Teacher Satisfaction
18. Total Effectiveness

Hypotheses of the Study

The hypotheses tested in this study are derived from an examination of Hersey and Blanchard's Life Cycle Theory of Leadership. As related to effectiveness, the Life Cycle Theory of Leadership suggests an inverse relationship between maturity of followers and task-oriented leader behavior; it further suggests a curvilinear relationship between the maturity of followers and relationships-oriented leader behavior.
Hypothesis I. There is a positive correlation between effectiveness and high task-oriented, low relationship-oriented perceived leader behavior when the followers are of below average maturity.

Hypothesis II. There is a positive correlation between effectiveness and either high or low task-oriented, high relationships-oriented perceived leader behavior when the followers are of average maturity.

Hypothesis III. There is a positive correlation between effectiveness and low task-oriented, low relationships-oriented perceived leader behavior when the followers are of above average maturity.

Figure 3 illustrates the optimum effective leader behavior curve as it relates to the three hypotheses. Although the four quadrants depicted in Figures 1 and 2 are not identified, a comparison of the two figures will show that the segment of the effective leader behavior curve for average maturity accommodates both patterns of leadership depicted in quadrants 2 and 3 of Figures 1 and 2.
Fig. 3. Optimum effective leader behavior curve.
CHAPTER II

REVIEW OF THE LITERATURE

Early Leadership Studies

Leadership was initially believed to be the property of a limited number of uniquely endowed individuals (McGregor, 1960). The earliest approach to the study of leadership centered around efforts to identify universal characteristics of persons already in leadership positions so that potential leaders could be more easily recognized. Studies ranged from attempted determinations of physical, intellectual, and personality traits of leaders to those special skills and behaviors which somehow separated them from the other members of the group.

At best, findings from such studies can be said merely to reflect certain tendencies. Leaders tended to be bigger and brighter, but not too much so. Leaders tended to be better adjusted as measured by various personality tests. Leaders tended to be more active in giving and requesting information. Cartwright and Sander (1968) point out the inconclusive nature of two intensive examinations of research in the area of leadership. Byrd (1940), studying the research prior to 1940, compiled a list of 79 traits that had been discovered in one or more investigations. However, only five percent of the traits on the list were common to four
or more of the studies. Stogdill (1958), making a more recent examination of studies, produced results that were no less contradictory.

Leaders tended to excel non-leaders in dependability, intelligence, scholarship, social participation and activity, and socio-economic status.

One of the major problems of early leadership studies was the lack of a common definition of leadership. Fiedler (1971) identified a few definitions of leadership that illustrate the varying views of writers on the subject. The last definition in the series is his own.

Leadership is the exercise of authority and the making of decisions (Dubin 1951).

Leadership is the initiation of acts that result in a consistent pattern of group interaction directed toward the solution of mutual problems (Hemphill 1954).

The leader is the man who comes closest to realizing the norms the group values highest; the conformity gives him his high rank, which attracts people and implies the right to assume control of the group (Homans 1950).

The leader is the person who creates the most effective change in group performance (Cattell 1951).

The leader is one who succeeds in getting others to follow him (Cowley 1928).

Leadership is the process of influencing group activities toward goal setting and goal achievement (Stogdill 1948).

The leader (is) the individual in the group who has the task of directing and coordinating task-relevant group activities [p. 2].
An expanded concept of leadership expressed by Cattell (1951) proposed the view that any member of a group exerts leadership to the extent that the properties of the group are modified by his presence. Importance was attached to the functions of the group and the specific actions of group members that contributed to those functions. Krech and Crutchfield (1949) listed 14 functions of a leader: executive, planner, policy maker, expert, external group representative, controller of internal rewards and punishments, arbitrator, exemplar, group symbol, surrogate for individual responsibility, ideologist, father-figure, or scapegoat.

Two important ideas emerged from the broadened concept of leadership functions. First, that insofar as any group member acts to serve group functions, he is a leader. Second, that different behaviors may serve the same function.

Studies of Leadership Dimensions

From the variety of leadership functions that were being differentiated there emerged clusters around two broad classifications: goal achievement and group maintenance (Cartwright and Zander, 1968). Figure 4 shows the behaviors exemplified in each.

As the two dimensions of leadership functions became more closely identified, leaders emerged who appeared to function in one or the other of the needed roles. Often two leaders were in the same group with the outcome of group performance being directly related to the successful coordination between the two styles. Hersey and Blanchard (1969) refer to these contrasting styles as the "either/or styles of leader behavior [p. 1]."
<table>
<thead>
<tr>
<th>Goal Achievement</th>
<th>Group Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiates action</td>
<td>Keeps interpersonal relationships pleasant</td>
</tr>
<tr>
<td>Keeps members' attention on the goal</td>
<td>Arbitrates disputes</td>
</tr>
<tr>
<td>Clarifies the issue</td>
<td>Provides encouragement</td>
</tr>
<tr>
<td>Develops a procedural plan</td>
<td>Gives the minority a chance to be heard</td>
</tr>
<tr>
<td>Evaluates the quality of work done</td>
<td>Stimulates self-direction</td>
</tr>
<tr>
<td>Makes expert information available</td>
<td>Increases the inter-dependence among members</td>
</tr>
</tbody>
</table>

Fig. 4. Classification of leadership functions (Cartwright and Zander, 1968, p. 307).
and suggest they be depicted as a single dimension along a continuum from one extreme to the other. Various names have been attached to the opposite poles of the continuum. Tannenbaum and Schmidt (1958) use the terms Boss-centered (Autocratic) and Subordinate-centered (Democratic) as shown in Figure 5.

Likert (1961, 1967) at one time used the terms Authoritative and Participative. He later changed to System 1 and System 4 as identification of the extreme poles of the continuum with Systems 2 and 3 indicating the intermediate stages (see Figure 6). Likert (1961) cites data collected in a study by the Institute of Social Research to indicate that employee-centered supervisors had better performance records than those supervisors who were considered job-centered. Further research findings indicated that management systems moving toward System 4 were more productive, had lower costs and more favorable attitudes than those nearer System 1 (Likert 1967).

The Ohio State Leader Studies (Halpin, 1966), investigating the leader behavior of fifty-two B-29 aircraft commanders, found that the two dimensions of leader behavior were on two separate axes with the effective leaders scoring high on both dimensions. The dimensions were identified on the basis of a Leader Behavior Description Questionnaire (LBDQ), originally constructed by Hemphill and Coons (1957) and adapted by Halpin and Winer (1957). Halpin's description of the two dimensions of leader behavior (Stogdill and Coons, 1957) is as follows:
Fig. 5. Continuum of Leadership Behavior (Tannenbaum and Schmidt, 1958, p. 96).
<table>
<thead>
<tr>
<th>Organizational variable</th>
<th>System 1</th>
<th>System 2</th>
<th>System 3</th>
<th>System 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership processes used</td>
<td>Have no confidence or trust in subordinates</td>
<td>Have condescending confidence and trust...</td>
<td>Substantial but not complete confidence and trust...</td>
<td>Complete confidence and trust...</td>
</tr>
<tr>
<td>Extent to which superiors have confidence and trust in subordinates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Character of motivational forces</td>
<td>Fear, threats, punishment, and occasional rewards</td>
<td>Rewards and some actual or potential punishment</td>
<td>Rewards, occasional punishment and some involvement</td>
<td>Economic rewards based on...system developed through group participation</td>
</tr>
<tr>
<td>Manner in which motives are used</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Character of interaction/influence process</td>
<td>Little interaction and always with fear and distrust</td>
<td>Little interaction and usually with fear and caution...</td>
<td>Moderate interaction, often with...confidence and trust...</td>
<td>Extensive...interaction with high...confidence and trust</td>
</tr>
<tr>
<td>Amount and character of interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fig. 6. Examples of items from Likert's table of organizational and performance characteristics of different management systems (Hersey and Blanchard, 1972, p. 63).
Initiating Structure refers to the leader's behavior in delineating the relationship between himself and members of the workgroup, and in endeavoring to establish well-defined patterns of organization, channels 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 his staff [p. 4].

The concept of the two dimensions of leader behavior as a pair of coordinates is illustrated in Figure 7.

Blake and Mouton (1964) developed the Ohio State quadrants even further in their Managerial Grid, labeling the quadrants and identifying a fifth style located in the center of the grid (see Figure 8). The terminology used by Blake and Mouton in labeling the grid dimensions and the Grid Training Sessions which they introduced to develop effective leaders are ample evidence of their preference for the 9-9 style of leadership.

1, 9 Management

Thoughtful attention to needs of people for satisfying relationships leads to a comfortable friendly organization atmosphere and work tempo.

1, 1 Management

Exertion of minimum effort to get required work done is appropriate to sustain organization membership.
Fig. 7. The Ohio State leadership quadrants (Hersey and Blanchard, 1972, p. 74).
Fig. 8. The Managerial Grid leadership styles (Hersey and Blanchard, 1972, p. 75).
9, 9 Management

Work accomplishment is from committee people; interdependence through a "common stake" in organization purpose leads to relationships of trust and respect.

5, 5 Management

Adequate organization performance is possible through balancing the necessity to get out work with maintaining morale of people at a satisfactory level.

9, 1 Management

Efficiency in operations results from arranging conditions of work in such a way that human elements interfere to a minimum degree [p. 10].

Situational Leadership

Evident in all the studies referred to indicating a "best" style of leadership were unexplained cases which did not fit the conclusions drawn from the study. A rapidly growing series of investigations has sought to relate effective leader behavior to environmental variables consisting of the leader, his followers, superiors, associates, organization, and job demands (see Figure 9). Contingency models have been developed to rank and select the most crucial variables for comparison in some systematic way (Lorsch and Lawrence, 1970).

Fiedler (1967, 1971) over a 15-year period conducted 35 studies involving 1,600 groups. Despite the diversity of the groups studied--a baseball team, military crews, industrial organizations, Calvinists and Catholics in Holland--Fiedler was able to identify one situational variable upon which the effectiveness of a particular leadership style is contingent. He refers to the variable as the degree to which the group enables the leader to assert influence or the favorableness of the situation for the
Fig. 9. Interacting components of an organizational setting

(Hersey and Blanchard, 1972, p. 110).
the leader. The three major aspects of the leader's situation that determine his influence are: (a) leader-member relationship, (b) structuredness of the task, and (c) position power. Fiedler concluded that relationships-motivated leaders perform best under conditions that are intermediate in favorableness and that task-motivated leaders perform best under conditions that are very favorable or relatively unfavorable for them.

Lawrence and Lorsch (1967, 1969) identified certainty in the environment as the variable related to effective leader behavior. They hypothesized that the structured behavior (task) of the leader is inversely related to the degree of certainty of the environment--certainty being determined by the rate of change of environmental conditions, the certainty of information at any point in time about environmental conditions, and the time span of definite feedback from the environment. In a study of high- and low-performing companies in three different industries, Lawrence and Lorsch concluded that there was a closer fit in the high-performing organizations than in the low-performing organizations between the attributes of each unit and the demands of its relevant part of the environment.

Hersey and Blanchard (1969, 1972) in their Life Cycle Theory stress the maturity of the followers as the critical variable. The major factors of maturity are: (a) achievement-motivation (McClelland et al., 1953, 1961), (b) willingness and ability to take responsibility, and (c) task-relevant education and experience. Chronological age is not considered to be directly related to maturity as used in the Life Cycle. The Life
Cycle concept of maturity is consistent with the Immaturity/Maturity continuum of Argyris (1957). The curvilinear relationship proposed in the model was suggested by Korman (1966) as an outgrowth of his review of studies examining the Ohio State leadership dimensions. Hersey and Blanchard's Life Cycle Theory holds that

Beginning with structured task behavior, which is appropriate for working with immature people, . . . leader behavior should move through (1) high task-low relationships behavior to (2) high task-high relationships and (3) high relationships-low task behavior to (4) low task-low relationships behavior, if one's followers progress from immaturity to maturity [1. 135].

Illustrations of the theory were given in examinations of the parent/child relationship, the management of research and development personnel, and educational settings.

Ducharme (1970) in his thesis for a Master of Arts Degree examined the relationship between maturity level and leader behavior preference among 572 urban, elementary school teachers in Toronto, Canada. In his study, maturity was conceptualized in three dimensions: achievement motivation, independence, and responsibility (Hersey and Blanchard, 1970). Leader behavior was conceptualized in two dimensions: task-orientation and relationships-orientation (Stogdill and Coons, 1957). Ducharme found no relationship between maturity level and task-oriented leader behavior preference among elementary school teachers. There
was, however, a direct relationship between maturity level and relationships oriented behavior when the independence dimension of maturity was not included. The data indicated no relation between leader behavior preference and other variables such as length of teaching experience, certification level, education level, age, sex, responsibility position, and staff size. He recommended that further examination of the maturity-leader behavior relationship take place, using only one dimension of maturity before examining the relationship when several dimensions are used to compose maturity.

Review of Management Theories

Changing views of leadership and management have been based on changing assumptions about the nature of man. The principles of Scientific Management developed by Taylor (1947) reflect the concept of Rational-Economic Man—a man described by Schein (1965) as a "passive agent to be motivated, manipulated, and controlled by the organization [p. 48]." The underlying managerial assumptions of Scientific Management have been labeled by McGregor (1960) as Theory X. Theory X depicts man as primarily concerned with economic rewards, lacking in ambition, and desirous of external control and direction. Time and motion studies, rigid discipline on the job, and a strict application of incentive pay systems characterized the managerial system's attempt to meet the perceived needs of workers and to provide maximum prosperity for employee and employer alike (Owens, 1970; Taylor, 1947).
In an attempt to arrive at some scientific answers to problems of boredom, fatigue and efficiency, the Hawthorne Plant of the Western Electric Company began what is now considered a landmark in industrial relations (Herzberg, 1966). The Hawthorne Studies extended over a period of five years, 1927--1932, beginning with five girls in a test room and ending with an interview program that covered 20,000 persons. Mayo (1963) describes the experiment as involving two groups of workers--an experimental group and a control group. Variations in lighting, rest periods and other aspects of work conditions were instituted in an attempt to scientifically determine the conditions necessary for increased output of workers. Human factors unintentionally defeated the intent of the experiment. No consistent correlation could be found between the experimental innovations and the increased productivity of workers--a productivity which continued even when there was a return to the original work conditions. Merrill (1970), summarizing Mayo's conclusions regarding the studies of industrial workers, states that the material factors of economic self-interest, lighting, and rest periods were strongly outweighed as motivating forces by the human factors of a sense of participation and a feeling of being a member of the team. The Hawthorne Studies "ushered" in the Human Relations Movement with a new set of managerial strategies and a new set of assumptions about Social Man. Awareness of the workers' human needs of identity and acceptance shifted the manager's role from that of boss to sympathetic supervisor and facilitator (Schein, 1965).
Closely related to the concept of Social Man is that of Self-Actualizing Man. Highly congruent assumptions about the nature of Self-Actualizing Man have been expressed in highly divergent ways. A framework developed by Abraham Maslow (1954) depicts a hierarchy into which human needs arrange themselves (see Figure 10). The physiological needs are the basic human needs to sustain life—food, clothing, and shelter. Once the basic needs are somewhat gratified, the safety or security needs become dominant. Security needs relate to self-preservation and reflect a concern for the future. Next to emerge are social needs—needs to belong and be accepted—followed by the need for esteem. Self-actualization, the need to maximize one's potential, becomes potent only after the other needs have become adequately satisfied. Maslow's hierarchy of needs is not to be construed as meaning that one level of needs must be completely satisfied before movement to the next level occurs, but rather reflects the probable pattern of need emergence.

Using Maslow's concept of self-actualization, McGregor (1960) developed Theory Y as an alternate to the Theory X assumptions about man. Theory Y attributes to man the potential to be self-directed and creative in work situations. Management practices based on the Theory Y view of man imposed less external control and encouraged the development of organizational goals compatible with the goals of management and the goals of subordinates. Figure 11 illustrates McGregor's contrasting views of human behavior.
Fig. 10. Maslow's hierarchy of needs (Hersey and Blanchard, 1972, p. 23).
<table>
<thead>
<tr>
<th>Theory X</th>
<th>Theory Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Work is inherently distasteful to most people.</td>
<td>1. Work is as natural as play, if the conditions are favorable.</td>
</tr>
<tr>
<td>2. Most people are not ambitious, have little desire for responsibility, and prefer to be directed.</td>
<td>2. Self-control is often indispensable in achieving organizational goals.</td>
</tr>
<tr>
<td>3. Most people have little capacity for creativity in solving organizational problems.</td>
<td>3. The capacity for creativity in solving organizational problems is widely distributed in the population.</td>
</tr>
<tr>
<td>4. Motivation occurs only at the physiological and safety levels.</td>
<td>4. Motivation occurs at the social, esteem, and self-actualization levels as well as physiological and security levels.</td>
</tr>
<tr>
<td>5. Most people must be closely controlled and often coerced to achieve organizational objectives.</td>
<td>5. People can be self-directed and creative at work if properly motivated.</td>
</tr>
</tbody>
</table>

**Fig. 11.** List of assumptions about nature of man which underline McGregor's Theory X and Theory Y (Hersey and Blanchard, 1972, p. 47).
Although management based on earlier assumptions was theorized to be no longer appropriate, the old practices continued to exist. Argyris (1957) examined industrial organizations to determine the effect of management practices on individual behavior and human growth. According to Argyris, seven changes should take place when an individual matures (see Figure 12). Argyris contends that the management practices utilized in many organizations prevent the maturation of employees. As examples he cites two instances in which mentally retarded girls placed in unskilled jobs were highly praised for their performance, thus substantiating his impression of the low level at which work is often designed.

Herzberg (1966) directed a series of studies that concentrated on the importance of esteem and self-actualization needs. The findings led to his development of a theory of work motivation with broad implications for management. From interviews with workers in a variety of industries there emerged the identification of two different categories of needs. When people felt dissatisfied with their jobs, they were concerned about their working environment; when they felt good about their jobs, the work itself was the important issue. Herzberg called the first category "hygiene factors" and the second category "motivators" (see Figure 13). He concluded the hygiene factors do not increase worker output but only prevent losses in worker performance, whereas motivators often result in an increase in worker output (Hersey and Blanchard, 1972).
Immaturity ——————————— Maturity

Passive ——————————— Active
Dependence ——————————— Independence
Behave in a few ways ———— Capable of behaving in many ways
Erratic shallow interests ——— Deeper and stronger interests
Short time perspective ———— Long time perspective (past and future)
Subordinate position —————— Equal or subordinate position
Lack of awareness of self ——— Awareness and control over self

Fig. 12. Immaturity/maturity continuum (Hersey and Blanchard, 1972, p. 51).
<table>
<thead>
<tr>
<th>HYGIENE FACTORS</th>
<th>MOTIVATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>The Job Itself</td>
</tr>
<tr>
<td>Policies and administration</td>
<td>Achievement</td>
</tr>
<tr>
<td>Supervision</td>
<td>Recognition for accomplishment</td>
</tr>
<tr>
<td>Working conditions</td>
<td>Challenging work</td>
</tr>
<tr>
<td>Interpersonal relations</td>
<td>Increased responsibility</td>
</tr>
<tr>
<td>Money, status, security</td>
<td>Growth and development</td>
</tr>
</tbody>
</table>

Fig. 13. Motivation and hygiene factors (Hersey and Blanchard, 1972, p. 55).
It is evident that the managerial strategy for use with Self-Actualizing Man is similar to that used with Social Man. The addition of such features as the delegation of responsibility, power organization, and concern with making the work more meaningful served to shift motivation from an extrinsic to an intrinsic state (Schein, 1965).

More recently, a realization has come about that the previous theories and assumptions about man have been too generalized and too simplified. Man is a more complex individual than can be expressed in any single theory. Man is complex within himself and in his uniqueness from his neighbor (Schein, 1965). No one managerial strategy can be effective with all men in all situations. The Complex Man necessitates a manager who is a good diagnostician, flexible, and "prepared to accept a variety of interpersonal relationships, patterns of authority, and psychological contracts [p. 61]."

Schein's description of the flexible managerial style necessitated by the concept of Complex Man is consistent with the implications of Hersey and Blanchard's Life Cycle Theory of Leadership. Appropriate leader behavior in the Life Cycle Theory is related to one element of the Complex Man, the follower's degree of maturity. This investigation of the Life Cycle Theory in urban elementary schools was undertaken with the expectation that, while sharing many common characteristics, each school would maintain its individuality and each follower would remain unique thus necessitating a manager capable of appropriately
adapting his leadership behavior to meet the needs of a complex set of followers.
CHAPTER III

PROCEDURES

Research Site

The Louisville Independent District, the school system selected for the study, serves the largest city in the State of Kentucky and reflects the dramatically changing pattern of urban school districts throughout the country. In 1972 Louisville had an enrollment of 45,570 students of which 50.3 were black. Thirty-five percent of the students came from low income families. More than 75 percent of the students scored below national norms in reading and mathematics. The dropout rate in 1970 was the second highest in the nation and, though reduced, still indicated in 1972 a loss of more than 600 students in a five month period (Barber, 1972, 1973, 1973a).

In 1969 a new superintendent and an initially small cadre of change agents had set about humanizing the educational process of the Louisville Public School System (Rogers, 1970). The main strategy of the intervention had been a massive Human Relations Training Program directed toward central office staff, principals, and instructional staff of selected target schools. The Human Relations thrust accompanied by an increasing availability of federal funds brought about changes in the Louisville System
reflected in the organizational structure, the curriculum, and the interactions among central office staff, local school staff, students, and community. The anticipated changes in academic achievement were not as clearly identified (Barber, 1972).

The early, intense concentration on Human Relations Training has since been replaced by highly structured preservice and inservice training of an instructional nature. The School System's greatest need and recognized priority is reading. A new program, Diagnostic-Prescriptive-Individualized Reading (DPI), was developed to address that need at the primary level. The DPI Reading Program is a compensatory education program in which pupils with identified needs acquire basic reading skills. Its objective is a reduction by one-half of the deficiency between 1971 and 1974 post-test scores of the total reading score of the California Test of Basic Skills (CTBS). As outlined in the DPI Handbook (1972), the management system used by the DPI Program insures a high degree of consistency in its implementation in the schools.

Subject Population

The subject population for the study was composed of eight elementary school principals and 355 building staff members--classroom teachers, reading specialists, librarians, counselors, clerks, and paraprofessionals who functioned as monitoring technicians, reading aides, and teacher assistants.
The selection of schools was based on certain shared characteristics. First, the poverty level of the schools was equal to or higher than the average of the District as a whole, thereby qualifying them for Title I Programs and Services. Second, although the staff of each school reflected the deliberate integration pattern established by the Louisville District, the student population reflected the segregated housing patterns of the city. Third, reading scores in the selected schools averaged .4 of a grade level below the system mean of 5.2 at the end of grade six and two grade levels below the national norm (6.8). Fourth, following an intensive summer training program for staff, the DPI Reading Program was implemented in the schools.

Procedures for Implementing the Study

Requests to do research in the Louisville Public School System must be processed by the Research Review Committee that functions under the direction of the System's Department of Research, Evaluation and Development. The prescribed procedure was followed and permission was received to carry out the proposed study. The support of the superintendent and the Department of Research, Evaluation and Development was also assured.

A meeting took place with the principals of 17 elementary schools under consideration for the study. At that time the superintendent publicly expressed his approval of the project and stated that the study would be of value to the District. The nature of the study was explained
and the cooperation of the principals was solicited. Sixteen principals indicated their willingness to participate in the study, pending the approval of their faculties. One principal indicated that he did not wish to participate but was interested in viewing the instruments that would be used to determine leadership behavior. It was agreed that after the selection of schools was completed, participating principals would assume the following responsibilities:

1. Seek the cooperation of their staff members.
2. Distribute materials to staff members.
3. Return materials to the investigator.

The commitment was made to provide each principal with the data generated concerning his leadership behavior.

Although it initially appeared that seventeen schools met the criteria as indicated, further examination of school organization revealed staffing patterns in eight of the seventeen schools that tended to diffuse the leadership role of the principal—in three cases assistant principals or principal-interns were assigned to the schools; in five others, team-teaching models were utilized with coordinating teachers assuming a strong leadership role. One additional school was eliminated due to the principal's unwillingness to participate.

Telephone conversations took place with each of the eight remaining principals to inform them of their selection and to confirm their willingness to participate.
Sets of materials were assembled for each of the eight schools. Packets for individual participants consisted of a letter of explanation, three questionnaires, and two answer sheets. In order to protect the anonymity of individual staff members, a coding system was used. Each school was assigned a series of numbers. The principals were given the first number in the series; the staff members followed sequentially. The identification of the principal was essential to the study and had been understood and agreed upon by the principals.

Materials were sent to each principal. Enclosed was a cover letter reviewing the procedures to be followed. Also enclosed were self-addressed envelopes for the return of materials to the investigator's office.

The time element was determined by the data required for the study. It was assumed that all leaders (principals) would exhibit more task-oriented behavior at the beginning of the school year. It was also assumed that new staff members would need time to formulate their perceptions of the principals' behavior. Consequently, questionnaires were not sent to the schools until after mid-year. Data relating to effectiveness were not available until the Louisville District's compilations were completed after the end of the school year.

Instrumentation

Three research instruments were used in the study and are described briefly here. Copies of the instruments can be found in Appendix A.
Leader Behavior Description Questionnaire (LBDQ). The LBDQ, developed in the 1950's as a part of the Ohio State Leadership Studies, was used to identify the behavior or style of the leader. The questionnaire contains two 15 item scales, each of which measures one of the two dimensions of leader behavior. The responses are given a numerical value from zero to four and summed to determine the measure of task-oriented and relationships-oriented behavior. The instrument has been used in industrial, military, and educational settings. Its validity and reliability have been assessed repeatedly. The estimated reliability by the split method is .83 for the Initiating Structure (Task) scale and .92 for the Consideration (Relationships) scale (Halpin, 1959). Although this study is concerned with the behavior of the leader as perceived by his followers, leaders (principals) were also requested to complete the questionnaire indicating their perceptions of their own leadership behavior.

Personal Orientations Inventory (POI). The POI was used to determine follower maturity. It was developed by Everett L. Shostrom in 1964 with the encouragement of Abraham Maslow, to measure values and behaviors seen as being important in the process of self-actualization. The POI consists of 150 items of two-choice comparative value and behavior judgements. It contains two basic scales of personal orientation: inner-directed support with 127 items, and time competence with 23 items. Ten sub-scales measuring conceptually important
elements of self-actualization were not used in this study. The POI has been used in educational, industrial, clinical, and counseling settings. Its reliability and validity have been tested repeatedly. The test/re-test reliability co-efficients for the major scales of Time Competence and Inner-Direction are .71 and .84 respectively (Shostrom, 1968). The selection of the POI as the instrument for measuring maturing in this investigation was based on Ducharme's study (1970). Its two dimensional concept of maturity, inner-directed support and time competence, facilitate and examination of Ducharme's conclusion that the independence dimension of maturity has no direct relationship to the leader behavior variable and his recommendation concerning the need for further examination of the maturity level leader behavior relation when only one dimension of maturity is involved. The response of leaders (principals) was not essential to the study but was requested to encourage the full participation of staff members.

Demographic Data Sheet (DDS). The Demographic Data Sheet was designed by the investigator with the assistance of the Department of Research and Evaluation, Louisville Public Schools, primarily to identify follower characteristics that are referred to in this study as secondary or traditional predictor variables. These include the dimensions of maturity defined by Hersey and Blanchard which relate to task relevant education and experience. The DDS consists of ten items, eight of which are applicable to all the subjects. Item nine is
applicable to only a portion of the draft; item ten is applicable to the principal only.

Data Collection

Upon the return of the completed questionnaires from the schools, those of the principals were removed. As stated earlier, the participation of principals was requested primarily to encourage the full participation of staff members. Of the 363 sets of questionnaires sent to the eight participating schools, 274 or 75% were returned—eight from principals and 266 from staff members. Of the 266 sets of questionnaires returned from staff members, an initial screening determined that 24 of the POI forms were unusable due to the number of unmarked or doubly marked responses. A summary of school returns is presented in Table 1.

As a result of deliberately providing staff participants with anonymity, it was impossible to re-contact those who did not return questionnaires or those whose questionnaires were inadequately completed. Two possible reasons are offered for the lack of response from twenty-five percent of the staff:

1. The frequent requests to the schools for information which is perceived as being unrelated to the job.

2. The voluntary nature of the participation.

An assumption was made by the investigator that the non-respondents did not differ significantly from the respondents and that their lack
### TABLE 1

**SUMMARY OF QUESTIONNAIRE RETURNS BY SCHOOLS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Staff Size</th>
<th>Respondents</th>
<th>POI's Usable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Staff</td>
<td>Principal</td>
</tr>
<tr>
<td>100</td>
<td>38</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>200</td>
<td>43</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>300</td>
<td>35</td>
<td>28</td>
<td>1</td>
</tr>
<tr>
<td>500</td>
<td>52</td>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td>600</td>
<td>50</td>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>700</td>
<td>61</td>
<td>54</td>
<td>1</td>
</tr>
<tr>
<td>800</td>
<td>37</td>
<td>34</td>
<td>1</td>
</tr>
<tr>
<td>900</td>
<td>47</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>N</td>
<td>363</td>
<td>266</td>
<td>8</td>
</tr>
</tbody>
</table>
of participation did not significantly alter the results.

Data relating to the criterion variables were provided by the Department of Research and Evaluation and the Department of Employee Personnel of the Louisville Public School System. Figure 14 shows the design of data collection.
### Fig. 14. Design of data collection.

<table>
<thead>
<tr>
<th>Leader Behavior</th>
<th>Follower Maturity</th>
<th>Traditional Predictor Variables</th>
<th>Criterion Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Above</td>
<td>Average</td>
<td>Below</td>
</tr>
<tr>
<td>LT - LR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LT-HR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HT-HR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HT-LR</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- LT = Low Task
- HT = High Task
- LR = Low Relationship
- HR = High Task
CHAPTER IV

RESULTS

This chapter is divided into four sections. Section one deals with the presentation of all pertinent data for the total population and the eight school subgroups. Section two deals with correlations of all pertinent variables for the total population of the study. Section three is devoted to tests of the hypotheses, analyzing effectiveness as a function of perceived leader behavior and follower maturity. Section four deals with the relationship between the variables of the hypotheses and secondary or traditional predictor variables.

The analysis was carried out with the use of the CDC 3,800 and CDC 6,000 computers at the University of Massachusetts. Programs from the Statistical Package for the Social Sciences (SPSS) were used: Subprogram CODEBOOK, Subprogram PEARSON CORR, Subprogram T-TEST, and Subprogram REGRESSION (Nie, Bent and Hull, 1970).

Presentation of Data

Primary predictor variables. Following the directions of the Leader Behavior Description Questionnaire (LBDQ), each respondent's score was calculated. The mean of each scale was established for the total population and for each of the eight schools. The perceived leader behavior was categorized with mean scores of 40 and above considered
high and mean scores below 40 considered as low. See Appendix B, Directions for Scoring LBDQ.

Of the four possible leadership patterns defined by the LBDQ, staff perceptions indicated the following identifications:

1. One principal was categorized as high task/low relationships-oriented.

2. Four principals were categorized as high task/high relationships-oriented.

3. Three principals were categorized as low task/high relationships-oriented.

4. No examples of low task/low relationships-oriented behavior were evident.

Since Hypothesis III is concerned with low task/low relationships-oriented leader behavior, tests of Hypothesis III were eliminated from the study. Scoring and classification of perceived leader behavior are illustrated in Table 2.

The Personal Orientation Inventory (POI) was then scored and the mean of each scale was determined for the population as a whole and separately for each of the eight schools. Profile scale scores are presented and used in the analysis rather than ratio scores based on recommendations in the POI Manual (Shostrum, 1966, p. 7). According to the directions of the Profile Sheet for the Personal Orientation Inventory, a score of above average would fall above the mid-line shown
# TABLE 2

**MEANS OF LBDQ (LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Task</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{X} )</td>
<td>S.D.</td>
</tr>
<tr>
<td>100</td>
<td>37.375</td>
<td>8.665</td>
</tr>
<tr>
<td>200</td>
<td>39.543</td>
<td>12.412</td>
</tr>
<tr>
<td>300</td>
<td>44.607</td>
<td>7.279</td>
</tr>
<tr>
<td>500</td>
<td>45.645</td>
<td>14.099</td>
</tr>
<tr>
<td>600</td>
<td>39.421</td>
<td>12.710</td>
</tr>
<tr>
<td>700</td>
<td>45.000</td>
<td>8.045</td>
</tr>
<tr>
<td>800</td>
<td>36.676</td>
<td>9.816</td>
</tr>
<tr>
<td>900</td>
<td>39.889</td>
<td>13.016</td>
</tr>
<tr>
<td>Cases</td>
<td>266</td>
<td></td>
</tr>
<tr>
<td>( \bar{X} )</td>
<td>41.286</td>
<td></td>
</tr>
<tr>
<td>S.D.</td>
<td>11.168</td>
<td></td>
</tr>
</tbody>
</table>
by a standard score of 50 on the Profile Sheet. This is approximated to be 17.66 on the time competence scale and 88.33 on the inner-directed scale. See Appendix B, Profile Sheet for the Personal Orientation Inventory.

In order to distinguish between average and below average scores, the rounded mean of the total population for each of the scales was used. For the time competence scale, scores of 16 and above were considered average; scores below 16 were considered below average. For the inner-directed scale, scores of 79 and above were considered average; scores below 79 were considered below average. The classifications of staff groups were as follows:

1. Four groups were classified as average time competent/average inner-directed.
2. One group was classified as average time competent/low inner-directed.
4. Two groups were classified as low time competent/low inner-directed.

The lack of appropriate follower groups of a high maturity level further confirmed the elimination of tests of Hypothesis III. The POI scores and classifications are shown in Table 3.

For purposes of this study, each scale of the POI is considered separately during the investigation of effectiveness as a function of leader behavior and follower maturity. This manner of treatment of
TABLE 3

MEANS OF POI (PERSONAL ORIENTATION INVENTORY)

<table>
<thead>
<tr>
<th>Code</th>
<th>T COMP TIME COMPETENCE</th>
<th>INDEP INDEPENDENCE (Inner-directed)</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{X} )</td>
<td>S.D.</td>
<td>( \bar{X} )</td>
</tr>
<tr>
<td>100</td>
<td>16.774</td>
<td>2.418</td>
<td>81.452</td>
</tr>
<tr>
<td>200</td>
<td>17.421</td>
<td>1.895</td>
<td>83.053</td>
</tr>
<tr>
<td>300</td>
<td>16.423</td>
<td>2.626</td>
<td>80.077</td>
</tr>
<tr>
<td>500</td>
<td>15.926</td>
<td>3.902</td>
<td>77.444</td>
</tr>
<tr>
<td>600</td>
<td>15.500</td>
<td>2.524</td>
<td>79.056</td>
</tr>
<tr>
<td>700</td>
<td>15.140</td>
<td>3.356</td>
<td>78.600</td>
</tr>
<tr>
<td>800</td>
<td>15.462</td>
<td>3.547</td>
<td>78.308</td>
</tr>
<tr>
<td>900</td>
<td>14.889</td>
<td>3.816</td>
<td>76.148</td>
</tr>
<tr>
<td>Cases</td>
<td>242</td>
<td></td>
<td>242</td>
</tr>
<tr>
<td>( \bar{X} )</td>
<td>15.814</td>
<td></td>
<td>79.107</td>
</tr>
<tr>
<td>S.D.</td>
<td>3.167</td>
<td></td>
<td>10.685</td>
</tr>
</tbody>
</table>
the maturity dimensions is based on Ducharme's findings and recommendations (1970).

Criterion Variables. The effectiveness measures are considered to be in two general categories—reading achievement and climate—each of which is further divided into two components.

Section one of reading achievement consists of standardized reading test scores for the total student populations in the eight sample schools. For Kindergarten the results of the Metropolitan Readiness Test (MRT), administered upon entrance to the first grade in the fall of 1973, were used. For grades one through six the result of the California Achievement Test (CAT) and California Test of Basic Skills (CTBS), administered in the spring of 1973, were used.

The second section of the reading achievement measurement deals with the results of the Diagnostic Prescriptive Individualized Reading Program, implemented in grades one through three in the participating schools. Although the total reading achievement scores for grades one through three include the DPI scores, a separate breakout of DPI test results is presented. In this investigation, DPI data provide the only indication of the results of a single treatment applied to all eight schools and as such are considered to be the best single measurement of effectiveness as it relates to the interaction of leader behavior and follower maturity. The hypotheses of this study, however, are based on total effectiveness.
Reading achievement scores are illustrated in Table 4.

One set of measurements relating to climate deals with student attitudes about school—attendance, tardiness, suspensions, delinquency referrals, and vandalism. The vandalism cost for one school was unavailable due to the public school system's method of reporting. The system's records presented the combined cost of vandalism for both the elementary school and junior high school at this location. To compensate for the missing value, the mean of the vandalism data was assigned.

The second set of data relating to climate concerns itself with teacher job satisfaction and involves teacher resignations, retirements, transfer requests from sample schools, and transfer requests to sample schools. Actual transfers were not considered as a valid indicator of teacher job satisfaction due to the school system's policy of transfers to achieve racial balance.

Table 5 illustrates both components of the measurements of climate.

Table 6 is a summary of all the effectiveness measurements used in the study.

The scores of the criterion variables were converted to transformed standard scores and linearly summed by school within the four subcategories: total reading scores, DPI scores, student attitudes, and teacher job satisfaction. The sums of the four categories were then
### TABLE 4

**MEANS OF READING ACHIEVEMENT DATA  (1973)**

<table>
<thead>
<tr>
<th>School</th>
<th>K</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>23</td>
<td>1.8</td>
<td>1.8</td>
<td>2.9</td>
<td>3.3</td>
<td>4.8</td>
<td>5.6</td>
<td>1.9</td>
<td>1.6</td>
<td>2.8</td>
</tr>
<tr>
<td>200</td>
<td>22</td>
<td>1.5</td>
<td>2.4</td>
<td>3.4</td>
<td>4.1</td>
<td>4.9</td>
<td>5.5</td>
<td>1.1</td>
<td>2.3</td>
<td>3.0</td>
</tr>
<tr>
<td>300</td>
<td>20</td>
<td>1.8</td>
<td>2.5</td>
<td>2.8</td>
<td>3.5</td>
<td>3.6</td>
<td>4.0</td>
<td>1.3</td>
<td>2.5</td>
<td>2.0</td>
</tr>
<tr>
<td>500</td>
<td>24</td>
<td>1.8</td>
<td>2.1</td>
<td>2.7</td>
<td>2.7</td>
<td>4.1</td>
<td>4.3</td>
<td>1.8</td>
<td>1.9</td>
<td>2.3</td>
</tr>
<tr>
<td>600</td>
<td>29</td>
<td>1.6</td>
<td>2.3</td>
<td>3.3</td>
<td>3.3</td>
<td>3.6</td>
<td>4.5</td>
<td>1.3</td>
<td>2.1</td>
<td>3.2</td>
</tr>
<tr>
<td>700</td>
<td>24</td>
<td>1.6</td>
<td>2.2</td>
<td>3.0</td>
<td>3.0</td>
<td>3.7</td>
<td>4.1</td>
<td>1.1</td>
<td>1.2</td>
<td>2.9</td>
</tr>
<tr>
<td>800</td>
<td>27</td>
<td>1.7</td>
<td>2.3</td>
<td>2.9</td>
<td>3.3</td>
<td>4.4</td>
<td>4.3</td>
<td>1.1</td>
<td>2.3</td>
<td>2.0</td>
</tr>
<tr>
<td>900</td>
<td>23</td>
<td>1.0</td>
<td>1.8</td>
<td>3.0</td>
<td>3.3</td>
<td>3.7</td>
<td>4.7</td>
<td>.8</td>
<td>1.7</td>
<td>2.7</td>
</tr>
<tr>
<td>$\bar{X}$</td>
<td>24</td>
<td>1.6</td>
<td>2.2</td>
<td>3.0</td>
<td>3.3</td>
<td>4.2</td>
<td>4.6</td>
<td>1.3</td>
<td>1.9</td>
<td>2.6</td>
</tr>
<tr>
<td>S.D.</td>
<td>2.63</td>
<td>.33</td>
<td>.23</td>
<td>.21</td>
<td>.34</td>
<td>.5</td>
<td>.55</td>
<td>.34</td>
<td>.44</td>
<td>.43</td>
</tr>
</tbody>
</table>
### TABLE 5

**MEANS OF CLIMATE DATA (1973)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>941</td>
<td>45</td>
<td>3</td>
<td>2</td>
<td>39</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>200</td>
<td>912</td>
<td>119</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>300</td>
<td>899</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>133</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>500</td>
<td>920</td>
<td>125</td>
<td>0</td>
<td>0</td>
<td>359</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>600</td>
<td>944</td>
<td>100</td>
<td>0</td>
<td>1</td>
<td>104</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>700</td>
<td>930</td>
<td>127</td>
<td>0</td>
<td>0</td>
<td>71</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>800</td>
<td>923</td>
<td>84</td>
<td>0</td>
<td>1</td>
<td>235</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>900</td>
<td>928</td>
<td>137</td>
<td>0</td>
<td>1</td>
<td>112</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>(X)</td>
<td>924.7</td>
<td>104.6</td>
<td>.38</td>
<td>.63</td>
<td>133.4</td>
<td>1.4</td>
<td>1</td>
<td>.75</td>
<td>1.9</td>
</tr>
<tr>
<td>S.D.</td>
<td>13.7</td>
<td>27.8</td>
<td>.97</td>
<td>.7</td>
<td>105.8</td>
<td>.96</td>
<td>1</td>
<td>.96</td>
<td>2</td>
</tr>
</tbody>
</table>
### TABLE 6
**SUMMARY OF CRITERION VARIABLES**

<table>
<thead>
<tr>
<th>School</th>
<th>100</th>
<th>200</th>
<th>300</th>
<th>500</th>
<th>600</th>
<th>700</th>
<th>800</th>
<th>900</th>
<th>$\bar{X}$</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALTRKIND</td>
<td>23</td>
<td>22</td>
<td>20</td>
<td>24</td>
<td>29</td>
<td>23</td>
<td>27</td>
<td>23</td>
<td>24</td>
<td>2.63</td>
</tr>
<tr>
<td>RGONE</td>
<td>1.8</td>
<td>1.5</td>
<td>1.8</td>
<td>1.8</td>
<td>1.6</td>
<td>1.6</td>
<td>1.7</td>
<td>1.0</td>
<td>1.6</td>
<td>0.33</td>
</tr>
<tr>
<td>RGTWO</td>
<td>1.8</td>
<td>2.4</td>
<td>2.5</td>
<td>2.1</td>
<td>2.3</td>
<td>2.2</td>
<td>2.3</td>
<td>1.8</td>
<td>2.2</td>
<td>0.23</td>
</tr>
<tr>
<td>RGTHREE</td>
<td>2.9</td>
<td>3.4</td>
<td>2.8</td>
<td>2.7</td>
<td>3.3</td>
<td>3.0</td>
<td>2.9</td>
<td>3.0</td>
<td>3.0</td>
<td>0.21</td>
</tr>
<tr>
<td>RGFOUR</td>
<td>3.3</td>
<td>4.1</td>
<td>3.5</td>
<td>2.7</td>
<td>3.3</td>
<td>3.0</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td>0.34</td>
</tr>
<tr>
<td>RGFIVE</td>
<td>4.8</td>
<td>4.9</td>
<td>3.6</td>
<td>4.1</td>
<td>3.6</td>
<td>3.7</td>
<td>4.4</td>
<td>3.7</td>
<td>4.2</td>
<td>0.50</td>
</tr>
<tr>
<td>RGSIX</td>
<td>5.6</td>
<td>5.5</td>
<td>4.0</td>
<td>4.3</td>
<td>4.5</td>
<td>4.1</td>
<td>4.3</td>
<td>4.7</td>
<td>4.6</td>
<td>0.55</td>
</tr>
<tr>
<td>DPRGONE</td>
<td>1.9</td>
<td>1.1</td>
<td>1.3</td>
<td>1.8</td>
<td>1.3</td>
<td>1.1</td>
<td>1.1</td>
<td>1.3</td>
<td>1.3</td>
<td>0.35</td>
</tr>
<tr>
<td>DPRGTWO</td>
<td>1.6</td>
<td>2.3</td>
<td>2.5</td>
<td>1.9</td>
<td>2.1</td>
<td>1.2</td>
<td>2.3</td>
<td>1.7</td>
<td>1.9</td>
<td>0.41</td>
</tr>
<tr>
<td>DPRGTHR</td>
<td>2.8</td>
<td>3.0</td>
<td>2.0</td>
<td>2.3</td>
<td>3.2</td>
<td>2.9</td>
<td>2.0</td>
<td>2.7</td>
<td>2.6</td>
<td>0.43</td>
</tr>
<tr>
<td>ATEN</td>
<td>941</td>
<td>912</td>
<td>899</td>
<td>920</td>
<td>944</td>
<td>930</td>
<td>923</td>
<td>928</td>
<td>924.7</td>
<td>13.7</td>
</tr>
<tr>
<td>TARD</td>
<td>45</td>
<td>119</td>
<td>100</td>
<td>125</td>
<td>100</td>
<td>127</td>
<td>84</td>
<td>137</td>
<td>104.6</td>
<td>27.8</td>
</tr>
<tr>
<td>SUSP</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>.375</td>
</tr>
<tr>
<td>DELREF</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>.625</td>
</tr>
<tr>
<td>VANDAL</td>
<td>39</td>
<td>14</td>
<td>133*</td>
<td>359</td>
<td>104</td>
<td>71</td>
<td>235</td>
<td>112</td>
<td>133.4</td>
<td>105.8</td>
</tr>
<tr>
<td>RESIG</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>1.375</td>
<td>.96</td>
</tr>
<tr>
<td>RETIR</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>TRANRFRO</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>.75</td>
</tr>
<tr>
<td>TRANRTO</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>1.9</td>
<td>2.0</td>
</tr>
</tbody>
</table>

*Mean of vandalism score was used since data were unavailable.
linearly summed with the resulting total summation being used as the overall effectiveness measure as illustrated in Table 7. Three schools (100, 200 and 600) with a total effectiveness score higher than the mean were considered "more" effective. Five schools (300, 500, 700, 800, and 900) with scores below the mean were considered "less" effective. See Table 8. It should be noted that the same effectiveness groupings occur when only DPI data are considered.

**Traditional predictor variables.** Secondary predictor variables (traditional predictors) have been included for investigation in the study though they are not a part of the hypotheses. Three of these secondary situational variables may be considered as measurements of the task relevant education and experience dimension of maturity referred to in the Hersey and Blanchard definition. Table 9 summarizes the secondary predictor variables.

Table 10 presents a profile of each school, showing secondary predictor variables, the primary predictor variables of the hypotheses, and effectiveness.
linearly summed with the resulting total summation being used as the overall effectiveness measure as illustrated in Table 7. Three schools (100, 200 and 600) with a total effectiveness score higher than the mean were considered "more" effective. Five schools (300, 500, 700, 800, and 900) with scores below the mean were considered "less" effective. See Table 8. It should be noted that the same effectiveness groupings occur when only DPI data are considered.

**Traditional predictor variables.** Secondary predictor variables (traditional predictors) have been included for investigation in the study though they are not a part of the hypotheses. Three of these secondary situational variables may be considered as measurements of the task relevant education and experience dimension of maturity referred to in the Hersey and Blanchard definition. Table 9 summarizes the secondary predictor variables.

Table 10 presents a profile of each school, showing secondary predictor variables, the primary predictor variables of the hypotheses, and effectiveness.
### TABLE 7

**STANDARDIZED SCORES OF CRITERION VARIABLES BY CATEGORIES**

**AND TOTAL EFFECTIVENESS**

<table>
<thead>
<tr>
<th>School</th>
<th>Reading K-6</th>
<th>DPI Reading</th>
<th>Student Attitudes</th>
<th>Teacher Satisfaction</th>
<th>Total Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>362.8</td>
<td>164.5</td>
<td>245.5</td>
<td>222.6</td>
<td>995.4</td>
</tr>
<tr>
<td>200</td>
<td>419.6</td>
<td>163.4</td>
<td>259.4</td>
<td>191.8</td>
<td>1034.2</td>
</tr>
<tr>
<td>300</td>
<td>329.7</td>
<td>150.6</td>
<td>245.7</td>
<td>191.4</td>
<td>917.4</td>
</tr>
<tr>
<td>500</td>
<td>314.9</td>
<td>157.3</td>
<td>240.8</td>
<td>191.8</td>
<td>904.8</td>
</tr>
<tr>
<td>600</td>
<td>374.0</td>
<td>168.9</td>
<td>267.0</td>
<td>170.5</td>
<td>980.4</td>
</tr>
<tr>
<td>700</td>
<td>322.1</td>
<td>134.2</td>
<td>264.4</td>
<td>212.6</td>
<td>933.3</td>
</tr>
<tr>
<td>800</td>
<td>363.8</td>
<td>140.1</td>
<td>245.1</td>
<td>196.4</td>
<td>945.4</td>
</tr>
<tr>
<td>900</td>
<td>294.6</td>
<td>133.1</td>
<td>261.2</td>
<td>221.8</td>
<td>910.7</td>
</tr>
<tr>
<td>(\bar{X})</td>
<td>347.7</td>
<td>151.5</td>
<td>253.6</td>
<td>199.9</td>
<td>952.7</td>
</tr>
</tbody>
</table>

**S. D.** | 40.04 | 14.22 | 10.36 | 17.87 | 46.24
### TABLE 8

**TOTAL EFFECTIVENESS CLASSIFICATION**

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>School Code</th>
<th>Standardized Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>More</td>
<td>200</td>
<td>1034.2</td>
</tr>
<tr>
<td>More</td>
<td>100</td>
<td>995.4</td>
</tr>
<tr>
<td>More</td>
<td>600</td>
<td>980.4</td>
</tr>
<tr>
<td>Less</td>
<td>800</td>
<td>945.4</td>
</tr>
<tr>
<td>Less</td>
<td>700</td>
<td>933.3</td>
</tr>
<tr>
<td>Less</td>
<td>300</td>
<td>917.4</td>
</tr>
<tr>
<td>Less</td>
<td>900</td>
<td>910.7</td>
</tr>
<tr>
<td>Less</td>
<td>500</td>
<td>904.8</td>
</tr>
</tbody>
</table>
### Table 9

**Means of Traditional Predictor Variables**

<table>
<thead>
<tr>
<th>School</th>
<th>Sex</th>
<th>Ethnic</th>
<th>Age</th>
<th>Ed. Level</th>
<th>% of Tchrs.</th>
<th>% Cert.</th>
<th>Exp.</th>
<th>Time at School</th>
<th>School Size *</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>1.97</td>
<td>1.75</td>
<td>3.81</td>
<td>2.97</td>
<td>.56</td>
<td>2.06</td>
<td>3.09</td>
<td>2.5</td>
<td>1</td>
</tr>
<tr>
<td>200</td>
<td>1.96</td>
<td>1.73</td>
<td>3.68</td>
<td>3.14</td>
<td>.50</td>
<td>2.23</td>
<td>2.96</td>
<td>2.4</td>
<td>2</td>
</tr>
<tr>
<td>300</td>
<td>1.82</td>
<td>1.24</td>
<td>3.14</td>
<td>2.75</td>
<td>.46</td>
<td>1.92</td>
<td>2.71</td>
<td>2.0</td>
<td>1</td>
</tr>
<tr>
<td>500</td>
<td>1.77</td>
<td>1.29</td>
<td>2.68</td>
<td>3.07</td>
<td>.81</td>
<td>2.58</td>
<td>3.23</td>
<td>2.4</td>
<td>3</td>
</tr>
<tr>
<td>600</td>
<td>1.84</td>
<td>1.24</td>
<td>2.90</td>
<td>2.61</td>
<td>.50</td>
<td>1.87</td>
<td>2.47</td>
<td>2.1</td>
<td>2</td>
</tr>
<tr>
<td>700</td>
<td>1.96</td>
<td>1.19</td>
<td>3.17</td>
<td>2.57</td>
<td>.35</td>
<td>2.07</td>
<td>2.80</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>800</td>
<td>1.82</td>
<td>1.27</td>
<td>2.97</td>
<td>3.03</td>
<td>.65</td>
<td>2.26</td>
<td>3.38</td>
<td>2.6</td>
<td>1</td>
</tr>
<tr>
<td>900</td>
<td>1.93</td>
<td>1.33</td>
<td>3.33</td>
<td>2.74</td>
<td>.50</td>
<td>2.04</td>
<td>2.93</td>
<td>2.0</td>
<td>2</td>
</tr>
<tr>
<td>X</td>
<td>1.87</td>
<td>1.35</td>
<td>3.18</td>
<td>2.82</td>
<td>.53</td>
<td>2.12</td>
<td>2.93</td>
<td>2.3</td>
<td>1.97</td>
</tr>
<tr>
<td>S.D.</td>
<td>.4</td>
<td>.5</td>
<td>1.3</td>
<td>1.06</td>
<td>.5</td>
<td>1.0</td>
<td>1.6</td>
<td>1.4</td>
<td>.8</td>
</tr>
</tbody>
</table>

*1=male  1=black  1=below 20  1=below 1=less than one year  1=31-40
2=female 2=other  2=21-30 Sr. High 2=1-2 2=41-50
3=31-40 2=Sr. High 3=3-5
4=41-50 3=BA/BS 4=6-10
5=over 50 4=additional 5=More 3=over 50
<table>
<thead>
<tr>
<th>SEX</th>
<th>100</th>
<th>200</th>
<th>300</th>
<th>500</th>
<th>600</th>
<th>700</th>
<th>800</th>
<th>900</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHNIC</td>
<td>W</td>
<td>W</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>AGE</td>
<td>31-40</td>
<td>31-40</td>
<td>31-40</td>
<td>31-40</td>
<td>31-40</td>
<td>31-40</td>
<td>31-40</td>
<td>31-40</td>
</tr>
<tr>
<td>EDLVL</td>
<td>BA/BS</td>
<td>BA/BS</td>
<td>BA/BS</td>
<td>BA/BS</td>
<td>BA/BS</td>
<td>BA/BS</td>
<td>BA/BS</td>
<td>BA/BS</td>
</tr>
<tr>
<td>% TCHR</td>
<td>.50+Abv</td>
<td>.50+Abv</td>
<td>Bel.50</td>
<td>.50+Abv</td>
<td>.50+Abv</td>
<td>Bel.50</td>
<td>.50+Abv</td>
<td>.50+Abv</td>
</tr>
<tr>
<td>% CERT</td>
<td>.50+Abv</td>
<td>.50+Abv</td>
<td>Bel.50</td>
<td>.50+Abv</td>
<td>Bel.50</td>
<td>Bel.50</td>
<td>.50+Abv</td>
<td>Bel.50</td>
</tr>
<tr>
<td>EXP</td>
<td>3-5 yrs.</td>
<td>3-5 yrs.</td>
<td>3-5 yrs.</td>
<td>1-2 yrs.</td>
<td>3-5 yrs.</td>
<td>3-5 yrs.</td>
<td>3-5 yrs.</td>
<td>3-5 yrs.</td>
</tr>
<tr>
<td>SCHTINM</td>
<td>3-5 yrs.</td>
<td>1-2 yrs.</td>
<td>1-2 yrs.</td>
<td>1-2 yrs.</td>
<td>1-2 yrs.</td>
<td>1-2 yrs.</td>
<td>3-5 yrs.</td>
<td>1-2 yrs.</td>
</tr>
<tr>
<td>SIZE</td>
<td>31-40</td>
<td>41-50</td>
<td>31-40</td>
<td>Abv. 50</td>
<td>41-50</td>
<td>Abv. 50</td>
<td>31-40</td>
<td>41-50</td>
</tr>
<tr>
<td>LBDQ</td>
<td>LT/HR</td>
<td>HT/HR</td>
<td>HT/HR</td>
<td>HT/LR</td>
<td>LT/HR</td>
<td>HT/HR</td>
<td>LT/HR</td>
<td>HT/HR</td>
</tr>
<tr>
<td>T COMP</td>
<td>Av</td>
<td>Av</td>
<td>Av</td>
<td>Av</td>
<td>Av</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>INDEP</td>
<td>Av</td>
<td>Av</td>
<td>L</td>
<td>Av</td>
<td>Av</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>EFFECT</td>
<td>More</td>
<td>More</td>
<td>Less</td>
<td>Less</td>
<td>More</td>
<td>Less</td>
<td>Less</td>
<td>Less</td>
</tr>
</tbody>
</table>
Correlational Data

Table 11 shows the full correlation matrix for all pertinent variables developed and used in the present study. The computations were made from transformed standard scores. Means and standard deviations are included. Table 12 shows only those correlations that are considered to be significant (p.<05).

As anticipated there were no consistent significant correlations between single predictors, variables 1 through 15, and the four separate categories of effectiveness, variables 14 through 17. There were, however, significant direct correlations between four single predictors (V 3, 4, 6, and 7) and total effectiveness (V 18).

Significant positive intercorrelations were present among the traditional predictor variables considered to reflect the dimensions of maturity referred to by Hersey and Blanchard as task relevant education and experience: educational level (V 8), certification (V 10), and experience (V 11). Of these, educational level (V 8) had a significant direct relation to one of the dimensions of maturity defined in the study-time competence (V 3).
### Table 11
**Correlation Matrix of Total List of Pertinent Variables**

<table>
<thead>
<tr>
<th></th>
<th>Primary Predictors</th>
<th>Traditional Predictors</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 TASK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 RELAT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 TCOMP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 INDEP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 SEX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 RACE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 AGE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 EDLVL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 POSIT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 CERT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 EXP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 SCHTM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 SIZE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 TOTRG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 DPIRG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 STUATT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 TCHRSAT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 TOTEFF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Correlation Values**

- 2 RELAT: 1 58 85 -12 -65 -34 -15 -28 01 23 -11 51 62 52
- 3 TCOMP: 1 90 20 80 57 63 10 13 09 35 -34 70 68 -33 -14 69
- 4 INDEP: 1 40 72 63 35 -25 -15 -15 32 -33 84 63 00 -19 85
- 5 SEX: 1 58 85 -12 -65 -34 -15 -28 01 23 -11 51 62 52
- 6 RACE: 1 85 61 05 10 24 -13 -31 60 52 -13 30 77
- 7 AGE: 1 22 -42 -29 01 -02 -38 40 16 12 56 64
- 8 EDLVL: 1 69 73 76 04 -19 41 30 -63 01 31
- 9 POSIT: 1 79 69 -12 04 -60 26 -71 -19 -20
- 10 CERT: 1 78 -13 41 -05 -01 -54 01 -17
- 12 SCHTM: 1 -45 -02 -04 -53 -11 -19
- 13 SIZE: 1 -31 -18 37 -06 -25
- 14 TOTRG: 1 65 14 -43 93
- 15 DPIRG: 1 -10 -53 64
- 16 STUATT: 1 -09 28
- 17 TCHRSAT: 1 17
- 18 TOTEFF: 1
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>TASK</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>62</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>RELAT</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>85</td>
<td>82</td>
<td>64</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>79</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>TCOMP</td>
<td>.</td>
<td>1</td>
<td>90</td>
<td>80</td>
<td>63</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>70</td>
<td>68</td>
<td>.</td>
<td>69</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>INDEP</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>72</td>
<td>63</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>84</td>
<td>63</td>
<td>.</td>
<td>85</td>
<td>.</td>
</tr>
<tr>
<td>5 SEX</td>
<td>1</td>
<td>.</td>
<td>85</td>
<td>65</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>6 RACE</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>85</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>7 AGE</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>8 EDLVL</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>69</td>
<td>73</td>
<td>76</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>9 POSIT</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>10 CERT</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>11 EXP</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>12 SCHTM</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>13 SIZE</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>14 TOTRG</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>15 DPIRG</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>16 STUATT</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>17 TCHRSAT</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>18 TOTEFF</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
</tbody>
</table>
Tests of the Hypotheses

The hypotheses tested in the study are derived from an examination of Hersey and Blanchard's Life Cycle Theory of Leadership. As related to effectiveness, the Life Cycle Theory suggests an inverse relationship between maturity of followers and task-oriented leader behavior. It further suggests a curvilinear relationship between maturity of followers and relationships-oriented leader behavior.

Hypothesis I. There is a positive correlation between effectiveness and high task-oriented low relationships-oriented perceived leader behavior when the followers are of below average maturity.

Hypothesis II. There is a positive correlation between effectiveness and either high or low task-oriented high relationships-oriented perceived leader behavior when the followers are of average maturity.

Hypothesis III. There is a positive correlation between effectiveness and low task-oriented, low relationships-oriented perceived leader behavior when the followers are of above average maturity.

As indicated earlier, no examples of the leader behavior or mean follower maturity indicated in Hypothesis III were evident in the participating schools, thus making a test of Hypothesis III impossible. In further analyses only Hypothesis I and II are considered unless Hypothesis III is specifically indicated.
Tests involving the time competent dimension of maturity. Of the eight schools examined in the study, four were found to have the suggested relationships of the hypotheses between perceived leader behavior and the time competent dimension of follower maturity. Based on these relationships, two subgroups of schools were formed:

1. Group A consists of schools with the suggested relationships of the hypotheses—100, 200, 300, 600.
2. Group B consists of schools without the suggested relationships—500, 700, 800, 900.

A t-Test was used to determine if there were a significant difference between the two groups in terms of effectiveness. The criterion of significance established for the study (p.<.05) was exceeded and the hypotheses were accepted for the time competent dimension of maturity. See Table 13.

Tests involving the inner-directed dimension of maturity. Of the eight schools examined in the study, six were found to have the suggested relationships of the hypotheses between perceived leader behavior and the inner-directed dimension of follower maturity. Based on these relationships, two new subgroups were formed:

1. Group A\(^1\) consists of schools with the suggested relationships of the hypotheses—100, 200, 300, 500, 600, 700.
2. Group B\(^1\) consists of schools without the suggested relationships—800, 900.
<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Standard Deviation</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
<td>24.290</td>
<td>981.85</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>9.572</td>
<td>923.55</td>
</tr>
</tbody>
</table>

*1.943 = p = .05
A t-Test was used to determine if there were a significant difference between the two groups in terms of effectiveness. The criterion of significance established for the study (p.<05) was not reached and the hypotheses were rejected for the time competent dimension of maturity. See Table 14.

Traditional Predictor Variables

Having accepted the hypotheses for the Time Competent dimension of maturity, multiple regression analysis was used to examine the relationships between the secondary predictor variables and the primary variables of the hypotheses when the Time Competent dimension was involved. Stepwise Regression Analyses provided the results shown in Tables 15 and 16.

The first presentation, Table 15, is of the stepwise regression of the three major variables of the accepted hypotheses. Time competence (V 3) alone produced an RSQ of .47 for total effectiveness. However, when combined with task (V 1) and relationships (V 2), the explanation of variance accounted for reached .84. The inverse relationship between time competence (V 3) and task (V 1) as related to effectiveness (V 18) was predicted in the Hypotheses and suggested in the Life Cycle Theory. The positive relationship between time competence (V 3) and relationships (V 2) as related to effectiveness (V 18) was also predicted in the hypotheses and suggested in the
<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Standard Deviation</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>6</td>
<td>50.487</td>
<td>960.9167</td>
</tr>
<tr>
<td>B1</td>
<td>2</td>
<td>24.537</td>
<td>928.0500</td>
</tr>
</tbody>
</table>

* Not Significant
**TABLE 15**

STEPWISE REGRESSION PREDICTIONS OF EFFECTIVENESS FROM PRIMARY PREDICTOR VARIABLES OF THE HYPOTHESES INVOLVING THE TIME COMPETENT DIMENSION OF MATURITY

<table>
<thead>
<tr>
<th>Step Number</th>
<th>Variable Number</th>
<th>F To Enter/Remove</th>
<th>R Square</th>
<th>R Square Change</th>
<th>Simple R</th>
<th>Variance Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>5.36*</td>
<td>.47</td>
<td>.47</td>
<td>.69</td>
<td>Time Competence</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>4.02**</td>
<td>.71</td>
<td>.24</td>
<td>-.57</td>
<td>Task</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>.04</td>
<td>.84</td>
<td>.003</td>
<td>.22</td>
<td>Relationships</td>
</tr>
</tbody>
</table>

* Significant p < .05

** Near Significant p < .10
Life Cycle Theory for the levels of maturity determined in the study. The curvilinear nature of the relationship between the two variables (V 3 and 2) was not expected to be evident since tests of Hypotheses III had been eliminated from the study.

The next presentation, Table 16, is of the stepwise regression of the three major variables of the accepted hypotheses and the traditional predictor variables. Race (V 6) alone produced an RSQ of .59. When combined with experience (V 11), Task (V 1), Certification (V 10), Position (V 9), and Age (V 7), the explanation of variance accounted for reached .99. It was assumed that the high intercorrelations present among certain of the predictor variables prevented the entrance of time competence and relationships.

The results of the final presentation, Table 17, were provided by forcing the entry of the three major variables of the accepted hypotheses (V 1, 2, and 3) after which the traditional predictor variables were allowed to enter by the stepwise option. When taken by themselves, the three forced variables (V 1, 2, and 3) accounted for .71 of the variance. Combined with Sex (V 5), Educational level (V 8), and Certification (V 10), the explanation of variance accounted for reached .9985. Again, the directions of the relationships were as predicted in the accepted hypotheses and as suggested in the Life Cycle Theory for the level of maturity determined to be present in the study.
### Table 16

**Stepwise Regression Prediction of Effectiveness from Primary Predictor Variables of the Hypotheses Involving the Time Competent Dimension of Maturity and Traditional Predictor Variables**

<table>
<thead>
<tr>
<th>Step Number</th>
<th>Variable Number</th>
<th>F to Enter/Remove</th>
<th>R. Square</th>
<th>R. Square Change</th>
<th>Simple R</th>
<th>Variable Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>8.72*</td>
<td>.59</td>
<td>.59</td>
<td>.77</td>
<td>Race</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>1.65</td>
<td>.69</td>
<td>.10</td>
<td>-.13</td>
<td>Experience</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>1.39</td>
<td>.77</td>
<td>.07</td>
<td>-.59</td>
<td>Task</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>1.12</td>
<td>.83</td>
<td>.06</td>
<td>-.17</td>
<td>Certification</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>.80</td>
<td>.88</td>
<td>.05</td>
<td>-.20</td>
<td>Position</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>288.32*</td>
<td>.99</td>
<td>.12</td>
<td>.64</td>
<td>Age</td>
</tr>
</tbody>
</table>

* Significant $p < .05$
### TABLE 17
STEPWISE REGRESSION PREDICTIONS OF EFFECTIVENESS FROM PRIMARY PREDICTOR VARIABLES OF THE HYPOTHESES INVOLVING THE TIME, COMPETENT DIMENSION OF MATURITY AND TRADITIONAL PREDICTOR VARIABLES WITH PRIMARY PREDICTOR VARIABLES FORCED

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable Number</th>
<th>F To Enter/Remove</th>
<th>R Square</th>
<th>R Square Change</th>
<th>Simple R</th>
<th>Variance Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>5.36403*</td>
<td>.47</td>
<td>.47</td>
<td>.69</td>
<td>Time Competence</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>4.01655**</td>
<td>.71</td>
<td>.24</td>
<td>-.59</td>
<td>Task</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>.04002</td>
<td>.71</td>
<td>.003</td>
<td>.22</td>
<td>Relationships</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>5.99945**</td>
<td>.90</td>
<td>.19</td>
<td>.52</td>
<td>Sex</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>8.30856</td>
<td>.9982</td>
<td>.08</td>
<td>.31</td>
<td>Educational Level</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>11.47888</td>
<td>.9985</td>
<td>.02</td>
<td>-.17</td>
<td>Certification</td>
</tr>
</tbody>
</table>

* Significant p < .05
** Near significant p < .10
SUMMARY AND CONCLUSIONS

Introduction

Purpose and definition of terms. An attempt was made in this study to examine the interaction between perceived leader behavior and follower maturity as they relate to effectiveness in urban elementary schools. Leader behavior was considered to be a two-dimensional variable consisting of task-oriented behavior and relationships-oriented behavior. Maturity, though defined in the study as consisting of two dimensions, time competence and inner-directed support or independence, was viewed as a single dimension variable with only one of the dimensions being examined in the study at any given time. Effectiveness was considered to encompass two broad dimensions, each of which was further sub-divided as follows:

1. Student productivity (comprised of total reading achievement scores from Kindergarten through grade six and scores of students in a newly implemented Diagnostic-Prescriptive-Individualized Reading Program from grades one through three).

2. Climate/morale (comprised of student attitudes about school and teacher job satisfaction)

In summary, the purpose of the study was to examine perceived leader
behavior (both task-oriented and relationships-oriented behavior) and follower maturity (either time competence or inner-directed support at a given time) as they relate to total effectiveness (total reading achievement scores, DPI reading achievement scores, student attitudes about school, and teacher job satisfaction).

Hypotheses. The interactional model of leadership effectiveness used in the study was proposed by Hersey and Blanchard in their Life Cycle Theory of Leadership. It suggests an inverse relationship between maturity of followers and task-oriented leader behavior; it further suggests a curvilinear relationship between maturity of followers and relationships-oriented leader behavior. From the Life Cycle Theory three hypotheses were derived, as follows:

Hypothesis I. There is a positive correlation between effectiveness and high task-oriented, low relationships-oriented leader behavior when the followers are of below average maturity.

Hypothesis II. There is a positive correlation between effectiveness and either high or low task-oriented, high relationships-oriented leader behavior when the followers are of average maturity.

Hypothesis III. There is a positive correlation between effectiveness and low task-oriented, low relationships-oriented leader behavior when the followers are of above
average maturity.

To more clearly define the relationship between perceived leader behavior and follower maturity as they relate to effectiveness, other situational variables were also examined. Such variables were sometimes referred to secondary or traditional predictor variables. They included sex, race, age, educational level, position, certification, years of experience in position, length of time at sample school, and staff size.

Procedures

Instrumentation. Three research instruments were used to carry out the study. The first instrument, the Leader Behavior Description Questionnaire, was used to identify the behavior or style of the leader as perceived by his followers. The second instrument, the Personal Orientation Inventory, was used to determine follower maturity. The third instrument, a Demographic Data Sheet, was used to identify other situational variables.

Data Collection. Leaders (principals) and followers (building staff) of eight Title I elementary schools in the Louisville Independent District (Louisville, Kentucky) participated in the study. Of 363 sets of questionnaires sent out, 274 or seventy-five percent were returned. Eight of these were from principals and 266 were from staff members. The assumption was made that lack of participation of the twenty-five percent did not significantly alter the results.
Data for determination of the effectiveness measures were provided by the Department of Research and Evaluation and the Department of Employee Personnel of the Louisville Public School System.

Results

After calculation of scores, classifications were determined of perceived leader behavior and follower maturity by schools. Using data provided by the Public School System, an effectiveness rating for each school was determined through a linear summation of transformed standard scores of all the effectiveness measures. From the LBDQ results it was evident that no principals were perceived to exhibit low task/low relationships-oriented leader behavior. From the POI results it was evident that no set of followers scored at the above average level of maturity. Consequently, Hypothesis III could not be tested. In further analyses, only Hypotheses I and II were considered unless otherwise indicated.

Test of the hypotheses. Tests of the hypotheses were made using only one dimension of the maturity variable at a given time. Based on the suggested relationships of the hypotheses examining the time competent dimension of maturity, two sub-groups of schools were formed. Group A consisted of four schools with the suggested relationships; Group B consisted of four schools without the suggested relationships. In terms of total effectiveness there was found to be a significant difference between the two groups as determined through use of the t-Test.
The criterion of significance established for the study (p.<05) was exceeded and the hypotheses were accepted for the time competent dimension of maturity.

Based on the suggested relationships of the hypotheses examining the inner-directed support or independent dimension of maturity two new sub-groups of schools were formed. Group A\(^1\) consisted of six schools with the suggested relationships; group B\(^1\) consisted of two schools without the suggested relationships. In terms of effectiveness there was found to be no significant difference between the two groups as determined through use of the t-Test. The criterion of significance established for the study (p.<05) was not reached and the hypotheses were rejected for the inner-directed support dimension of maturity.

**Traditional Predictor Variables.** A Stepwise Regression Analysis was used to examine the relationship between the secondary predictor variables and the primary variables of the accepted hypotheses involving the time competent dimension of maturity.

The first analysis was of the three major variables of the hypotheses: time competence, task, and relationships as they relate to total effectiveness. The explanation of variance accounted for reached .84. The second analysis was of the stepwise regression of the three major variables of the accepted hypotheses and traditional predictor variables. Race, experience, task, certification, position and age accounted for .99 of the variance. In view of the high inter-correlations among
predictor variables a third analysis was carried out. Using the same variables, the entry of the three major variables was forced. The traditional predictor variables were then allowed to enter in the step-wise option. When taken by themselves, the three forced variables (time competence, task, and relationships) accounted for .71 of the variance. Combined with sex, educational level, and certification, the explanation of variance accounted for reached .9985.

In all instances, the direction of the relationship between time competence and task was inverse. The direction of the relationship between time competence and relationships was positive. The directions were as predicted in the hypotheses and as suggested in the Life Cycle Theory. The curvilinear nature of the relationship between time competence and relationships was not expected to be evident since tests of Hypothesis III had been eliminated from the study.

Conclusions

The conclusions drawn from the study are discussed in four sections:

1. The interaction of leader behavior and the time competent dimension of follower maturity as related to effectiveness

2. The interaction of leader behavior and the inner-directed support dimension of follower maturity as related to effectiveness
3. The relationship between the above and secondary situational variables (traditional predictor variables)


There is a significant positive correlation between effectiveness and perceived high task-oriented leader behavior of urban elementary school principals when their staffs score below average on the time competent dimension of maturity. There is also a significant positive correlation between effectiveness and either perceived high or low task-oriented leader behavior of urban elementary principals when their staffs score average on the time competent dimension of maturity.

There is no significant positive correlation between effectiveness and perceived high task-oriented leader behavior of urban elementary principals and effectiveness when their staffs score below average on the inner-directed support dimension of maturity. There is no significant correlation between effectiveness and either perceived high or low task-oriented behavior of urban elementary principals when their staffs score average on the inner-directed support dimension of maturity.

The addition of certain traditional or secondary predictor variables to the primary predictor variables (follower maturity and leader behavior) in the regression equation enhances the prediction of effectiveness.
The suggested relations of the Life Cycle Theory are confirmed for below average and average maturity levels when the time competent dimension of maturity is involved. The relationships lose significance when the inner-directed support dimension of maturity is involved.

Though the conclusions concerning the Life Cycle Theory differ from those drawn by Ducharme in his study, his findings are confirmed concerning the weakening of the suggested relationships when the independent (inner-directed) dimension of maturity is involved. It seems advisable that, considering the significant relationships of effectiveness and leader behavior/follower maturity, school systems be conscious of and make appropriate application of the Life Cycle Theory in the selection, pairing, and training of principals and staffs in urban elementary schools.

Limitations

The conclusions drawn from the study are considered to be generalizable to all of the Louisville elementary schools. There is no apparent reason to indicate that generalization could not extend to elementary schools in other urban areas as well. The primary restriction on such generalizations and other generalizations is viewed as being "responsibility" or "credit" for productivity (reading achievement).

Treatment external to the school, either through the home, community, or the pupil's own instigation, could greatly influence achievement scores, thus negating the relationship of leader behavior and follower
maturity to effectiveness.

The limitations apparent at the beginning of the study must still be recognized. First, the investigation did not take place over time; there was no cycle of maturity for a given group of followers. The relationship between leader behavior/follower maturity and effectiveness was determined by investigating different sets of followers, functioning at varying levels of maturity, rather than by passing any given group through the postulated stages. Second, there were few subjects and no staffs (mean of subjects by schools) functioning at an above average level of maturity. Third, the selection process, size of sample population, and number of groups undoubtedly limited the degree of generalization. In addition, the twenty-five percent of non-respondents, though not assumed to influence, yet could have had influence on the results of the study.

Recommendations

The following recommendations are made concerning further examination of the interaction of leader behavior and follower maturity as they relate to effectiveness.

1. A method should be provided by the investigator for re-contact with non-respondents.

2. Analysis should be made of unanswered items on the Personal Orientation Inventory (POI).
3. Replications of the study should involve a larger and more diverse sample.

4. Further analysis is needed of the relationships between the dimensions of maturity.

5. Replications of the study should be made examining both the single dimensions of maturity and the combined dimensions.

6. Consideration should be given to determining follower maturity through an assessment of the individual members' perceptions of the group maturity level.
REFERENCES


Bird, C. Social psychology. Appleton, 1940.


APPENDIX A
RESEARCH INSTRUMENTS
DEMOGRAPHIC DATA SHEET

DIRECTIONS

The ten items on this page are to be answered about yourself. Responses to items are to be marked on the blue answer sheet. Please match the number of the item and the letter in front of the correct answer on this page with the number and letter on the blue answer sheet. Mark only one answer for each item. For example, if you are between 21 and 30 years of age, blacken between the lines headed "B" on the blue answer sheet as in the example below.

1. Sex
   (A) Male (B) Female

2. Race
   (A) Black (B) White (C) Other

3. Chronological Age
   (A) Below 20 (B) 21-30 (C) 31-40 (D) 41-50 (E) Over 50

4. Educational Level Completed
   (A) Less than Senior High (B) Senior High (C) B.A./B.S.
   (D) Additional

5. Position
   (A) Teacher (B) Paraprofessional (C) Clerk (D) Principal
   (E) Other

6. Certification for Position
   (A) Not Needed (B) Presently Being Completed (C) Completed

Please use a pencil not a pen. ERASE COMPLETELY any answers you wish to change.
7. Years of Experience in this Position
   (A) Less than 1  (B) 1-2  (C) 3-5  (D) 6-10  (E) More than 10

8. Years Worked in this School
   (A) Less than 1  (B) 1-2  (C) 3-5  (D) 6-10  (E) More than 10

9. Grade Level Taught (if applicable)
   (A) Pre-school  (B) 1-3  (C) 4-6

10. Staff Size (to be completed by Principal only)
     (A) Below 20  (B) 21-30  (C) 31-40  (D) 41-50  (E) Over 50
LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE

DIRECTIONS

Items 41-70 describe aspects of leadership behavior. READ each item carefully. THINK about how frequently the Principal in your school engages in the behavior described by the item. DECIDE whether he always, often, occasionally, seldom or never acts as described by the item. CHECK the appropriate column on the blue answer sheet to show the answer you have selected.

Always - Column A
Often - Column B
Occasionally - Column C
Seldom - Column D
Never - Column E

For example, if your principal makes his attitudes clear to the group often, blacken between the lines headed "B" on the blue answer sheet as in the example below.

EXAMPLE

II.  

41.
41. He makes his attitudes clear to the group.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

42. He tries out his new ideas with the group.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

43. He rules with an iron hand.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

44. He speaks in a manner not to be questioned.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

45. He criticizes poor work.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

46. He assigns subordinates to particular tasks.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

47. He schedules the work to be done.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

48. He maintains definite standards of performance.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

49. He emphasizes the meeting of deadlines.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

50. He encourages the use of uniform procedures.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

51. He makes sure that his part in the organization is understood.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

52. He asks that subordinates follow standard rules and regulations.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

53. He lets subordinates know what is expected of them.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

54. He sees to it that subordinates are working up to capacity.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

55. He sees to it that the work of subordinates is coordinated.
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never
56. He does personal favors for subordinates.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

57. He does little things to make it pleasant to be a member of the group.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

58. He is easy to understand.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

59. He finds time to listen to subordinates.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

60. He mixes with subordinates rather than keeping to himself.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

61. He looks out for the personal welfare of individuals in his group.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

62. He explains his actions to subordinates.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

63. He consults subordinates before action.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

64. He backs up subordinates in their action.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

65. He treats all subordinates as equals.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

66. He is willing to make changes.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

67. He is friendly and approachable.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

68. He makes subordinates feel at ease when talking with them.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

69. He puts suggestions made by his group into action.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never

70. He gets group approval in important matters before acting.  
   (A) Always  (B) Often  (C) Occasionally  (D) Seldom  (E) Never
PERSONAL ORIENTATION INVENTORY (POI)

DIRECTIONS

This inventory consists of pairs of numbered statements. Read each statement and decide which of the two paired statements most consistently applies to you. There are 150 numbered statements. You are to mark your answers on the red answer sheet. Although five columns are present for each item you are to use only the first two columns. If the first statement of the pair is TRUE or MOSTLY TRUE as applied to you, blacken the lines in column "A" headed "T". (See example "1" below) If the second statement of the pair is TRUE or MOSTLY TRUE as applied to you, blacken between the lines in column "B" headed "F". (See example "2" below) If neither statement applies to you, or if the statements refer to something you don't know about, make no answer on the answer sheet. Remember to give your own opinion of yourself and do not leave blank spaces if you can avoid it.

Be sure that the number of the statement agrees with the number on the answer sheet.

EXAMPLE

III.  

1. T F  

   

   2. A B C D E

   [ ] [ ] [ ] [ ] [ ]

   [ ] [ ] [ ] [ ] [ ]
1. a. I am bound by the principal of fairness.
   b. I am not absolutely bound by the principle of fairness.

2. a. When a friend does me a favor, I feel that I must return it.
   b. When a friend does me a favor, I do not feel that I must return it.

3. a. I feel I must always tell the truth.
   b. I do not always tell the truth.

4. a. No matter how hard I try, my feelings are often hurt.
   b. If I manage the situation right, I can avoid being hurt.

5. a. I feel that I must strive for perfection in everything that I undertake.
   b. I do not feel that I must strive for perfection in everything that I undertake.

6. a. I often make my decisions spontaneously.
   b. I seldom make my decisions spontaneously.

7. a. I am afraid to be myself.
   b. I am not afraid to be myself.

8. a. I feel obligated when a stranger does me a favor.
   b. I do not feel obligated when a stranger does me a favor.

9. a. I feel that I have a right to expect others to do what I want of them.
   b. I do not feel that I have the right to expect others to do what I want of them.

10. a. I live by values which are in agreement with others.
    b. I live by values which are primarily based on my own feelings.
11. a. I am concerned with self-improvement at all times.
    b. I am not concerned with self-improvement at all times.

12. a. I feel guilty when I am selfish.
    b. I don't feel guilty when I am selfish.

13. a. I have no objection to getting angry.
    b. Anger is something I try to avoid.

14. a. For me, anything is possible if I believe in myself.
    b. I have a lot of natural limitations even though I believe in myself.

15. a. I put others' interests before my own.
    b. I do not put others' interests before my own.

16. a. I sometimes feel embarrassed by compliments.
    b. I am not embarrassed by compliments.

17. a. I believe it is important to accept others as they are.
    b. I believe it is important to understand why others are as they are.

18. a. I can put off until tomorrow what I ought to do today.
    b. I don't put off until tomorrow what I ought to do today.

19. a. I can give without requiring the other person to appreciate what I give.
    b. I have a right to expect the other person to appreciate what I give.

20. a. My moral values are dictated by society.
    b. My moral values are self-determined.
21. a. I do what others expect of me.
   b. I feel free to not do what others expect of me.

22. a. I accept my weaknesses.
   b. I don't accept my weaknesses.

23. a. In order to grow emotionally, it is necessary to know why I act as I do.
   b. In order to grow emotionally, it is not necessary to know why I act as I do.

24. a. Sometimes I am cross when I am not feeling well.
   b. I am hardly ever cross.

25. a. It is necessary that others approve of what I do.
   b. It is not always necessary that others approve of what I do.

26. a. I am afraid of making mistakes.
   b. I am not afraid of making mistakes.

27. a. I trust the decisions I make spontaneously.
   b. I do not trust the decisions I make spontaneously.

   b. My feelings of self-worth do not depend on how much I accomplish.

29. a. I fear failure.
   b. I don't fear failure.

30. a. My moral values are determined, for the most part, by the thoughts, feelings and decisions of others.
   b. My moral values are not determined, for the most part, by the thoughts, feelings and decisions of others.
31. a. It is possible to live life in terms of what I want to do.
    b. It is not possible to live life in terms of what I want to do.
32. a. I can cope with the ups and downs of life.
    b. I cannot cope with the ups and downs of life.
33. a. I believe in saying what I feel in dealing with others.
    b. I do not believe in saying what I feel in dealing with others.
34. a. Children should realize that they do not have the same rights and privileges.
    b. It is not important to make an issue of rights and privileges.
35. a. I can "stick my neck out" in my relations with others.
    b. I avoid "sticking my neck out" in my relations with others.
36. a. I believe the pursuit of self-interest is opposed to interest in others.
    b. I believe the pursuit of self-interest is not opposed to interest in others.
37. a. I find that I have rejected many of the moral values I was taught.
    b. I have not rejected any of the moral values I was taught.
38. a. I live in terms of my wants, likes, dislikes and values.
    b. I do not live in terms of my wants, likes, dislikes and values.
39. a. I trust my ability to size up a situation.
    b. I do not trust my ability to size up a situation.
40. a. I believe I have an innate capacity to cope with life.
    b. I do not believe I have an innate capacity to cope with life.
41. a. I must justify my actions in the pursuit of my own interests.
   b. I need not justify my actions in the pursuit of my own interests.
42. a. I am bothered by fears of being inadequate.
   b. I am not bothered by fears of being inadequate.
43. a. I believe that man is essentially good and can be trusted.
   b. I believe that man is essentially evil and cannot be trusted.
44. a. I live by the rules and standards of society.
   b. I do not always need to live by the rules and standards of society.
45. a. I am bound by my duties and obligations and duties to others.
   b. I am not bound by my duties and obligations to others.
46. a. Reasons are needed to justify my feelings.
   b. Reasons are not needed to justify my feelings.
47. a. There are times when just being silent is the best way I can express my feelings.
   b. I find it difficult to express my feelings by just being silent.
48. a. I often feel it necessary to defend my past actions.
   b. I do not feel it necessary to defend my past actions.
49. a. I like everyone I know.
   b. I do not like everyone I know.
50. a. Criticism threatens my self-esteem.
   b. Criticism does not threaten my self-esteem.
51. a. I believe that knowledge of what is right makes people act right.
   b. I do not believe that knowledge of what is right necessarily makes people act right.

52. a. I am afraid to be angry at those I love.
   b. I feel free to be angry at those I love.

53. a. My basic responsibility is to be aware of my own needs.
   b. My basic responsibility is to be aware of others' needs.

54. a. Impressing others is most important.
   b. Impressing myself is most important.

55. a. To feel right, I need always to please others.
   b. I can feel right without always having to please others.

56. a. I will risk a friendship in order to say or do what I believe is right.
   b. I will not risk a friendship just to say or do what is right.

57. a. I feel bound to keep the promises I make.
   b. I do not always feel bound to keep the promises I make.

58. a. I must avoid sorrow at all costs.
   b. It is not necessary for me to avoid sorrow.

59. a. I strive always to predict what will happen in the future.
   b. I do not feel it necessary always to predict what will happen in the future.

60. a. It is important that others accept my point of view.
   b. It is not necessary for others to accept my point of view.
61. a. I only feel free to express warm feelings to my friends.
   b. I feel free to express both warm and hostile feelings to my friends.

62. a. There are many times when it is more important to express feelings than to carefully evaluate the situation.
   b. There are very few times when it is more important to express feelings than to carefully evaluate the situation.

63. a. I welcome criticism as an opportunity for growth.
   b. I do not welcome criticism as an opportunity for growth.

64. a. Appearances are all-important.
   b. Appearances are not terribly important.

65. a. I hardly ever gossip.
   b. I gossip a little at times.

66. a. I feel free to reveal my weaknesses among friends.
   b. I do not feel free to reveal my weaknesses among friends.

67. a. I should always assume responsibility for other people's feelings.
   b. I need not always assume responsibility for other people's feelings.

68. a. I feel free to be myself and bear the consequences.
   b. I do not feel free to be myself and bear the consequences.

69. a. I already know all I need to know about my feelings.
   b. As life goes on, I continue to know more and more about my feelings.

70. a. I hesitate to show my weaknesses among strangers.
   b. I do not hesitate to show my weaknesses among strangers.
71. a. I will continue to grow only by setting my sights on a high-level, socially approved goal.
   b. I will continue to grow best by being myself.

72. a. I accept inconsistencies within myself.
   b. I cannot accept inconsistencies within myself.

73. a. Man is naturally cooperative.
   b. Man is naturally antagonistic.

74. a. I don't mind laughing at a dirty joke.
   b. I hardly ever laugh at a dirty joke.

75. a. Happiness is a by-product in human relationships.
   b. Happiness is an end in human relationships.

76. a. I only feel free to show friendly feelings to strangers.
   b. I feel free to show both friendly and unfriendly feelings to strangers.

77. a. I try to be sincere but I sometimes fail.
   b. I try to be sincere and I am sincere.

78. a. Self-interest is natural.
   b. Self-interest is unnatural.

79. a. A neutral party can measure a happy relationship by observation.
   b. A neutral party cannot measure a happy relationship by observation.

80. a. For me, work and play are the same.
   b. For me, work and play are the opposites.
81. a. Two people will get along best if each concentrates on pleasing the other.
   
   b. Two people can get along best if each person feels free to express himself.

82. a. I have feelings of resentment about things that are past.
   
   b. I do not have feelings of resentment about things that are past.

83. a. I like only masculine men and feminine women.
   
   b. I like men and women who show masculinity as well as femininity.

84. a. I actively attempt to avoid embarrassment whenever I can.
   
   b. I do not actively attempt to avoid embarrassment.

85. a. I blame my parents for a lot of my troubles.
   
   b. I do not blame my parents for my troubles.

86. a. I feel that a person should be silly only at the right time and place.
   
   b. I can be silly when I feel like it.

87. a. People should always repent their wrongdoings.
   
   b. People need not always repent their wrongdoings.

88. a. I worry about the future.
   
   b. I do not worry about the future.

89. a. Kindness and ruthlessness must be opposites.
   
   b. Kindness and ruthlessness need not be opposites.

90. a. I prefer to save good things for future use.
   
   b. I prefer to use good things now.
91. a. People should always control their anger.

   b. People should express honestly-felt anger.

92. a. The truly spiritual man is sometimes sensual.

   b. The truly spiritual man is never sensual.

93. a. I am able to express my feelings even when they sometimes result in undesirable consequences.

   b. I am unable to express my feelings if they are likely to result in undesirable consequences.

94. a. I am often ashamed of some of the emotions that I feel bubbling up within me.

   b. I do not feel ashamed of my emotions.

95. a. I have had mysterious or ecstatic experiences.

   b. I have never had mysterious or ecstatic experiences.

96. a. I am orthodoxly religious.

   b. I am not orthodoxly religious.

97. a. I am completely free of guilt.

   b. I am not free of guilt.

98. a. I have a problem in fusing sex and love.

   b. I have no problem in fusing sex and love.

99. a. I enjoy detachment and privacy.

   b. I do not enjoy detachment and privacy.

100. a. I feel dedicated to my work.

   b. I do not feel dedicated to my work.
101. a. I can express affection regardless of whether it is returned.
   b. I cannot express affection unless I am sure it will be returned.

102. a. Living for the future is as important as living for the moment.
   b. Only living for the moment is important.

103. a. It is better to be yourself.
   b. It is better to be popular.

104. a. Wishing and imagining can be bad.
   b. Wishing and imagining are always good.

105. a. I spend more time preparing to live.
   b. I spend more time actually living.

106. a. I am loved because I give love.
   b. I am loved because I am lovable.

107. a. When I really love myself, everybody will love me.
   b. When I really love myself, there will still be those who won't love me.

108. a. I can let other people control me.
   b. I can let other people control me if I am sure they will not continue to control me.

109. a. As they are, people sometimes annoy me.
   b. As they are, people do not annoy me.

110. a. Living for the future gives my life its primary meaning.
   b. Only when living for the future ties into living for the present does my life have meaning.
111. a. I follow diligently the motto, "Don't waste your time."
   b. I do not feel bound by the motto, "Don't waste your time."

112. a. What I have been in the past dictates the kind of person I will be.
   b. What I have been in the past does not necessarily dictate the kind of person I will be.

113. a. It is important to me how I live in the here and now.
   b. It is of little importance to me how I live in the here and now.

114. a. I have had an experience where life seemed just perfect.
   b. I have never had an experience where life seemed just perfect.

115. a. Evil is the result of frustration in trying to be good.
   b. Evil is an intrinsic part of human nature which fights good.

116. a. A person can completely change his essential nature.
   b. A person can never change his essential nature.

117. a. I am afraid to be tender.
   b. I am not afraid to be tender.

118. a. I am assertive and affirming.
   b. I am not assertive and affirming.

119. a. Women should be trusting and yielding.
   b. Women should not be trusting and yielding.

120. a. I see myself as others see me.
   b. I do not see myself as others see me.
121. a. It is a good idea to think about your greatest potential.
   b. A person who thinks about his greatest potential gets conceited.

122. a. Men should be assertive and affirming.
   b. Men should not be assertive and affirming.

123. a. I am able to risk being myself.
   b. I am not able to risk being myself.

124. a. I feel the need to be doing something significant all the time.
   b. I do not feel the need to be doing something significant all of the time.

125. a. I suffer from memories.
   b. I do not suffer from memories.

126. a. Men and women must be both yielding and assertive.
   b. Men and women must not be both yielding and assertive.

127. a. I like to participate actively in intense discussions.
   b. I do not like to participate actively in intense discussions.

128. a. I am self-sufficient.
   b. I am not self-sufficient.

129. a. I like to withdraw from others for extended periods of time.
   b. I do not like to withdraw from others for extended periods of time.

130. a. I always play fair.
   b. Sometimes I cheat a little.
131. a. Sometimes I feel so angry I want to destroy or hurt others.
   b. I never feel so angry that I want to destroy or hurt others.

132. a. I feel certain and secure in my relationships with others.
   b. I feel uncertain and insecure in my relationships with others.

133. a. I like to withdraw temporarily from others.
   b. I do not like to withdraw temporarily from others.

134. a. I can accept my mistakes.
   b. I cannot accept my mistakes.

135. a. I find some people who are stupid and uninteresting.
   b. I never find some people who are stupid and uninteresting.

136. a. I regret my past.
   b. I do not regret my past.

137. a. Being myself is helpful to others.
   b. Just being myself is not helpful to others.

138. a. I have had moments of intense happiness when I felt like I was experiencing a kind of ecstacy or bliss.
   b. I have not had moments of intense happiness when I felt like I was experiencing a kind of bliss.

139. a. People have an instinct for evil.
   b. People do not have an instinct for evil.

140. a. For me, the future usually seems hopeful.
   b. For me, the future often seems hopeless.
141. a. People are both good and evil.
   b. People are not both good and evil.

142. a. My past is a stepping stone for the future.
   b. My past is a handicap to my future.

143. a. "Killing time" is a problem for me.
   b. "Killing time" is not a problem for me.

144. a. For me, past, present and future is in meaningful continuity.
   b. For me, the present is an island, unrelated to the past and future.

145. a. My hope for the future depends on having friends.
   b. My hope for the future does not depend on having friends.

146. a. I can like people without having to approve of them.
   b. I cannot like people unless I also approve of them.

147. a. People are basically good.
   b. People are not basically good.

148. a. Honest is always the best policy.
   b. There are times when honestly is not the best policy.

149. a. I can feel comfortable with less than a perfect performance.
   b. I feel uncomfortable with anything less than a perfect performance.

150. a. I can overcome any obstacles as long as I believe in myself.
   b. I cannot overcome every obstacle even if I believe in myself.
APPENDIX B
SCORING

DIRECTIONS FOR SCORING (LBDG)

Total checks in each column of the previous page and enter in square below each column. The columns on the left hand represent the Initiating Structure values. The right hand columns represent Consideration values. Record the column totals in the Initiating Structure and Consideration boxes below. Multiply each of these totals by the weighting factors indicated. Add these for a grand total representing the Initiating Structure value and Consideration value.

### Initiating Structure

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>x 4</td>
</tr>
<tr>
<td>Often</td>
<td>x 3</td>
</tr>
<tr>
<td>Occasionally</td>
<td>x 2</td>
</tr>
<tr>
<td>Seldom</td>
<td>x 1</td>
</tr>
<tr>
<td>Never</td>
<td>x 0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Consideration

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>x 4</td>
</tr>
<tr>
<td>Often</td>
<td>x 3</td>
</tr>
<tr>
<td>Occasionally</td>
<td>x 2</td>
</tr>
<tr>
<td>Seldom</td>
<td>x 1</td>
</tr>
<tr>
<td>Never</td>
<td>x 0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>
LOCATING ONESELF ON THE OHIO STATE MODEL

Directions: In order to locate oneself in one of the four quadrants of the Ohio State Model below examine your score for **Initiating Structure**. If this score is 40 or above you would be considered high on that dimension; if it is below 40 you would be considered low on that dimension. For **Consideration**. If this score is 40 or above you would be considered high on that dimension; if it is below 40 you would be considered low on that dimension. In which quadrant does your score place you?

<table>
<thead>
<tr>
<th>High Consideration and Low Structure</th>
<th>High Structure and High Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Structure and Low Consideration</td>
<td>High Structure and Low Consideration</td>
</tr>
</tbody>
</table>

Initiating Structure
PROFILE SHEET FOR THE PERSONAL ORIENTATION INVENTORY

NAME

DATE Tested

AGE     SEX

OCCUPATION

TIME COMPETENT LINES IN THE PRESENT

INNERT-DIRECTED INDEPENDENT, SELF-ASSERTIVE

SELF-ACTUALIZING VALUE: HONDS VALUES OF SELF-ACTUALIZING PEOPLE

EXISTENCE OF VALUES: FLEXIBILITY IN APPLICATION OF VALUES

FEELING REACTIVITY: SENSITIVITY TO OWN NEEDS AND FEELINGS

SPONTANEITY: FREEDOM TO EXPRESS FEELINGS BEHAVIORALLY

SELF-REGARD: HONDS HIGH SELF-WORTH

SELF-ACCEPTANCE: ACCEPTING SELF IN SPITE OF WEAKNESSES

NATURE OF MAJOR CONFLICTS: SEES MANY AS ESSENTIALLY GOOD

SYNERGY: THINKS OF OPPONENTS AS LIFE AS MEANINGFULLY RELATED

ACCEPTANCE OF AGGRESSION: ACCEPTS FEELINGS AS MEANINGFULLY RELATED

CAPACITY FOR INTIMATE CONTACT: HAS WARM INTERPERSONAL RELATIONSHIPS

T<sub>c</sub>  1  2  3  4  5  6  7  8  9  10

SAV  EX  FR  S  SR  SN  NE  SY  A  C

ADULT NORMS

SCORES

TIME INCOMPLETE: TENT LINES IN THE PAST OR FUTURE

OTHER DIRECTED: DEPENDENT, SEeks SUPPORT OF OTHERS' VIEWS

REJECTS VALUES OF SELF-ACTUALIZING PEOPLE

RIGID IN APPLICATION OF VALUES

INSENSITIVE TO OWN NEEDS AND FEELINGS

FEARFUL OF EXPRESSING FEELINGS BEHAVIORALLY

HAS LOW SELF-WORTH

UNABLE TO ACCEPT SELF WITH WEAKNESSES

SEES MAN AS ESSENTIALLY GOOD

SEES OPPONENTS AS ANTAGONISTIC

GAMES FEELINGS; ANGER OR AGGRESSION

HAS DIFFICULTY WITH WARM INTERPERSONAL RELATIONSHIPS

RAW SCORES

COPYRIGHT © 1962, 1965 BY EDUCATIONAL & INDUSTRIAL TESTING SERVICE, SAN DIEGO, CALIFORNIA 92107

REPRODUCTION OF THIS FORM BY ANY MEANS STRICTLY PROHIBITED
BRIEF DESCRIPTION OF WHAT THE POI MEASURES

Your profile on the Personal Orientation Inventory (POI) shows the degree to which your attitudes and values compare with those of self-actualizing people. A self-actualizing person is one who is more fully functioning and who lives a more enriched life than does the average person. Such a person is developing and utilizing his unique talents to the fullest extent. It is generally agreed that a self-actualizing person might be seen as the desired result of the process of counseling or psychotherapy.

The interpretation of your scores falls into two general categories, the ratio scores and the profile scores. If your ratio scores are close to the scores that self-actualizing persons make, you may consider your values and attitudes, as measured by the POI, to be similar to these people. Your profile scores will further help you to compare yourself with self-actualizing people.

RATIO SCORES

Interpretation of the $T_I - T_C$ Ratio

In order to understand the Time Incompetent - Time Competent ($T_I - T_C$) ratio, it is of help to consider time in its three basic components--Past, Present, and Future.

The $T_I$ (Time Incompetent) person is one who lives primarily in the Past, with guilt, regret, and resentment, and/or in the future, with idealized goals, plans, expectations, predictions, and fears.

In contrast to the $T_I$ person, the $T_C$ (Time Competent) person lives primarily in the Present with full awareness, contact, and full feeling reactivity. Because it is known that the self-actualizing person is not perfect, he is understood to be partly $T_I$ and partly $T_C$. His $T_I - T_C$ ratio is, on the average, 1 to 8. His ratio shows that he, therefore, lives primarily in the Present and only secondarily in the Past or Future.

If your score is significantly lower than 1 to 8, for example 1 to 3, this suggests that you are more time incompetent than the self-actualizing person. If your score is above 1 to 8, for example 1 to 10, this suggests that you are excessively time competent and this may perhaps reflect a need to appear more self-actualized than you really are.
Interpretation of the O - I Ratio

In order to understand your score on the Support (Other - Inner) ratio, one should first understand that the self-actualizing person is both "other-directed" in that he is dependent upon and supported by other persons' views, and he is also "inner-directed" in that he is independent and self-supportive. The degree to which he is each of these can be expressed in a ratio. The O - I ratio of a self-actualizing person is, on the average, 1 to 3, which means that he depends primarily on his own feelings and secondarily on the feelings of others in his life decisions.

If your score is significantly higher than 1 to 3, that is 1 to 4 or above, it may be that this indicates an exaggerated independence and reflects a need to appear "too self-actualized" in responding to the POI. On the other hand, if your score is lower than 1 to 3, for example 1 to 1, it would suggest that you are in the dilemma of finding it difficult to trust either your own or others' feelings in making important decisions.

PROFILE SCORES

On the Profile Sheet, short descriptions of each of the sub-scales are shown which describe high and low scores. In general, scores above the average on these scales, that is, above the mid-line shown by a standard score of 50, but below a standard score of 60 are considered to be most characteristic of self-actualizing adults. The closer your scores are to this range, the more similar are your responses to the POI responses given by self-actualizing people. The further below the score 50 your scores are, the more they represent areas in which your responses are not like those of self-actualizing people. If most of your scores on the profile are considerably above 60, you may be presenting a picture of yourself which is "too" healthy or which overemphasizes your freedom and self-actualization. Your counselor can discuss the psychological rationale of each scale in greater detail with you.

The ratings from this inventory should not be viewed as fixed or conclusive. Instead they should be viewed as merely suggestive and to be considered in the light of all other information. The Personal Orientation Inventory is intended to stimulate thought and discussion or your particular attitudes and values. Your profile will provide a starting point for further consideration of how you can achieve greater personal development.