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THE RELATIONSHIPS BETWEEN INNOVATIVENESS,
ORGANIZATIONAL CLIMATE FACTORS, AND COMMUNICA-
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DEPARTMENTS OF SPECIAL EDUCATION IN MICHIGAN.**

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1971

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CLIMATE FACTORS, AND COMMUNICATIONS VARIABLES IN
INTERMEDIATE SCHOOL DISTRICT DEPARTMENTS OF
SPECIAL EDUCATION IN MICHIGAN

By

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ABSTRACT

THE RELATIONSHIPS BETWEEN INNOVATIVENESS, ORGANIZATIONAL CLIMATE FACTORS, AND COMMUNICATIONS VARIABLES IN INTERMEDIATE SCHOOL DISTRICT DEPARTMENTS OF SPECIAL EDUCATION IN MICHIGAN

By

Harrold William Spicknall

The rate of growth of special education programs for handicapped children has followed the slow adoption process pattern of innovations in general education. In Michigan 44 per cent of the handicapped children actually received service in special education programs in 1945. Yet in 1970, the per cent of handicapped children who received special education services had grown to only 65 per cent, an increase of 21 per cent in 25 years.

The concern of this study was to investigate the relationship between organizational climate variables, communication variables and the adoption of innovative special education programs, practices, and procedures. Knowledge of these relationships may help educators to hasten the growth of educational programs for handicapped children.

The population used in this study consisted of the 29 intermediate school districts in Michigan which employed a certified full-time director of special education and levied a tax ear-marked for special education programs. The responses of 520 intermediate special education staff members were used in the analysis of data.

Two of the instruments used in this study were constructed by the author. The Intermediate School District Innovativeness Scale (ISDIS), provided an innovativeness score based upon the adoption within each intermediate school district of 19 programs, practices, and procedures which had been fully adopted by less than 50 per cent of the districts in the population.

The Communication Variables Questionnaire (CVQ) provided scores for the following seven communications variables:

1. Use of Mass Media sources of information.
2. Use of Interpersonal sources of information.
3. Opinion leadership of director.
4. Professional involvement of staff.
5. Professional involvement of director.
6. Staff cosmopolitaness.
7. Director cosmopolitaness.

In this study the Organizational Climate Description Questionnaire was revised to make the items appropriate for intermediate school district use. The revised OCDQ

was factor analyzed and the revised factors were found to measure the same eight dimensions as the original OCDQ. These dimensions are called Disengagement, Hindrance, Esprit, Intimacy, Aloofness, Production, Emphasis, Thrust, and Consideration.

In addition to the three instruments above, the school-age population and the amount of money produced by the earmarked special education tax per child were obtained for each district from Michigan Department of Education records. These demographic variables were labeled population base, and financial base respectively.

The relationships between innovativeness and the organizational climate and demographic variables were analyzed through the use of Pearson Product Moment correlations.

The relationships between innovativeness and the communication variables were measured by multiple linear regression analysis. Staff professional involvement accounted for 19.9 per cent of the variance in innovativeness and was the only communication variable to have a significant relationship with innovativeness at the $p < .05$ level.

Findings

Of the 17 relationships tested, only four variables were significantly related to innovativeness. This study found the following four relationships:

1. Innovativeness of intermediate special education departments was positively related to the school-age population of the intermediate school district. Larger school-age population was associated with higher innovativeness.
2. Innovativeness of intermediate special education departments was positively related to the Esprit score on the revised OCDQ. Higher morale or Esprit was associated with higher innovativeness.
3. Innovativeness in intermediate special education departments was positively related to the Thrust score on the revised OCDQ. Higher Thrust was associated with higher innovativeness.
4. Innovativeness in intermediate special education departments was positively related to the professional involvement of the special education staff. Higher professional involvement was associated with higher innovativeness.

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TABLE OF CONTENTS

| | Page |
|---|------|
| ACKNOWLEDGMENTS | 11 |
| LIST OF TABLES | vi |
| LIST OF FIGURES | vii |
| LIST OF APPENDICES | viii |
| Chapter | |
| I. INTRODUCTION | 1 |
| Background | 1 |
| Diffusion of Educational Programs | 2 |
| Variables Related to Diffusion | 4 |
| The Population | 6 |
| Strategy and Purposes | 6 |
| Value of The Study | 7 |
| Overview | 9 |
| II. REVIEW OF THE LITERATURE | 11 |
| Introduction | 11 |
| Diffusion of Innovation Research | 11 |
| Innovativeness Research in Education | 16 |
| Intermediate School Districts | 22 |
| Research in Leadership Behavior | 23 |
| Organizational Climate Research | 26 |
| OCDQ in Diffusion of Innovations Research | 36 |
| Summary | 38 |
| III. METHODOLOGY | 41 |
| Introduction | 41 |
| Population | 41 |
| Intermediate School Districts | 41 |
| Intermediate Special Education Personnel | 45 |
| Instruments | 51 |
| Organizational Climate Description | |
| Questionnaire | 51 |
| Factor Analysis | 53 |

| Chapter | Page |
|--|------|
| Communication Variables | |
| Questionnaire | 55 |
| Intermediate School District | |
| Innovativeness Scale | 57 |
| Data Collection Procedures | 60 |
| Treatment of Data | 61 |
| Summary | 65 |
| IV. ANALYSIS OF DATA | 67 |
| Introduction | 67 |
| Results | 68 |
| Linear Regression Analysis | 72 |
| Summary | 77 |
| V. SUMMARY AND CONCLUSIONS | 82 |
| Summary | 82 |
| Findings | 84 |
| Conclusions | 85 |
| Conclusion 1 | 85 |
| Conclusion 2 | 86 |
| Conclusion 3 | 86 |
| Conclusion 4 | 87 |
| Discussion | 88 |
| Financial Base | 88 |
| Population Base | 89 |
| Opinion Leadership | 90 |
| Sources of Information | 91 |
| Recommendations | 93 |
| Implications for Further Study | 94 |
| Opinion Leadership | 94 |
| Financial Variables | 95 |
| Intermediate School District | 95 |
| Performance Variables | 95 |
| BIBLIOGRAPHY | 97 |
| APPENDICES | 106 |

LIST OF TABLES

| Table | Page |
|---|-------|
| 1. Basic Data on Michigan Intermediate School Districts Participating in This Study . . . | 44 |
| 2. Biographical Data on Intermediate Special Education Staff | 48-49 |
| 3. Correlations between Innovativeness and Demographic Variables | 68 |
| 4. Correlations between Innovativeness and Staff OCDQ Variables | 69 |
| 5. Correlations between Innovativeness and Director OCDQ Variables | 71 |
| 6. Results of Multiple Linear Regression Analysis of Communication Variables used to Predict Innovativeness | 73 |
| 7. Order of Deletion of Non-Significant Communication Variables from Linear Regression Equation | 74 |
| 8. Summary of Hypotheses | 78-79 |

LIST OF FIGURES

| Figure | Page |
|--|------|
| 1. Geographic Distribution of Population . . . | 46 |

LIST OF APPENDICES

| Appendix | Page |
|---|------|
| A. Organizational Climate Description Questionnaire | 107 |
| B. Intermediate School District Special Education Questionnaire | 116 |
| C. Supplementary Instructions for Intermediate School District Special Education Questionnaire | 126 |
| D. Rotated Item Factor Matrix for 64 Items of Intermediate Revision of OCDQ | 128 |
| E. Intercorrelation Matrix for 64 Items of Revised OCDQ | 130 |
| F. Factor Match Intercorrelation Matrix for Original and Revised OCDQ | 133 |
| G. Revised OCDQ Subtest Scores by Intermediate District | 135 |
| H. Per cent of Response on Sources of Information by Employment Position | 137 |
| I. Per cent of Response on Sources of Information by Intermediate District | 139 |
| J. Intermediate Special Education Staff and Director Scores for Communication Variables | 141 |
| K. Intermediate School District Innovativeness Scale | 143 |
| L. Innovativeness Scores of Intermediate Special Education Departments | 147 |
| M. Programs, Practices, and Procedures Adopted by Less than 50% of the Population and Defined as Innovation | 149 |

CHAPTER I

INTRODUCTION

Background

The study of the diffusion of innovations is the investigation of the manner in which a new idea or practice spreads throughout a social system. The focus of this study is the diffusion of innovations in the field of special education. The innovations of concern in this study are special education programs, practices, or procedures which have been adopted by less than half of the Michigan Intermediate School Districts. The social systems of concern are the American school system and, specifically, intermediate school district departments of special education of Michigan. In this chapter the general background of diffusion of educational innovations, a general discussion of variables linked to the diffusion of innovations is presented. The primary and secondary objectives and the contribution of this study are discussed. Finally, an overview of this study is included.

Diffusion of Educational Programs

The study of the diffusion of educational innovations is based upon over 150 studies of the adaptability and transition of the American schools. These studies were sponsored by Teachers College, Columbia University, during the late 1940's and 1950's. Mort and his colleagues developed the first systematic attempt to study educational change. These studies are discussed at greater length in Chapter II. However, the major contribution of these studies was to confirm the widely held view that the spread of a new educational program took approximately 50 years from the time of recognized need until the time of adoption by approximately 90% of the American Schools.

This slowness in the adoption of educational programs in general is also true for educational programs for handicapped children. This is illustrated by the following passage taken from the state plan for special education written in 1945 by John S. Haitema.

Atypical Neglected

Though making educational opportunity available for the atypical is possible, feasible, and a responsibility of the state, as will be shown in the appropriate places in the following chapters, it will be demonstrated that less than 44 per cent of the most favored group are given this opportunity. A study is necessary to indicate that there is a possibility of developing a plan whereby opportunities for the handicapped will be greatly improved.

Present Programs Patchwork

Much is done in Michigan for the atypical. Nevertheless the programs in all states have grown

and developed on the basis of expediency and well meant sympathy. The result is a patchwork of inconsistencies Some types of handicapped are provided for relatively well in contrast for whom practically nothing is done. Responsibilities for the education of some are entrusted to non-educational agencies and for some several agencies share accountability. Present conditions can be described as so confusing that only one who devotes considerable time to the problem and is consistently working in the area can understand the intricacies of the present organization. There is, therefore, a compelling need to develop a state plan which can be justified from the bases of criteria which will be developed in this study.

Growth of Programs

In 1920 there were but three states in which supervisors of special education of one or more types of atypical children were functioning on a state-wide basis. By 1930 their number had increased to 11; by 1940 to 19; and by 1942 to 23. "This," says Elise Martens, "is unmistakable evidence of the fact that states are more and more recognizing the special needs of exceptional children and attempting to stimulate and to guide local programs of education." . . . The conclusion seems warranted that were there no growth the study might even then be needed, but since the growth of the program is an ever increasing rate, the need for a study of this nature becomes even more compelling (pp. 1-3).

Haitema states that 44 per cent of the handicapped children of Michigan were receiving services in 1945. The present level of programming illustrates the painfully slow diffusion process for special education services. The Division of Special Education of the Michigan Department of Education estimated in 1969* that 65 per cent of the handicapped children of Michigan who could benefit from a special education program were

* Based on United States Office of Education Incidence figures.

being served. In a state that is recognized as one of the leaders in providing educational services for handicapped children, an estimated 35 per cent of these needs are unmet. Furthermore, it appears that there has only been a growth of 21 per cent in the past 25 years. At this growth rate of less than one per cent per year the educational needs of Michigan's handicapped children would not be met until after the year 2005.

Legally, morally and educationally the state can not afford to wait another 35 years to assure every Michigan child of his right to an education. Therefore, educators must explore every avenue which would reduce the discrepancy between the need and services delivered.

Variables Related to Diffusion

One approach to this problem is through the study of the diffusion of educational innovations. By identification of the variables which influence the adoption of educational innovations, and manipulation of these variables, educators may be able to reduce the time lag between recognition of a need and the fulfillment of that need.

Previous research reported in detail in Chapter II, has suggested that certain variables are related to innovativeness. Demographic variables such as the size of schools and school districts, or the financial

resources of school districts may influence the adoption rate of educational innovation.

Leadership behavior and organizational climate research have also contributed to the knowledge in the field of diffusion of innovations. Organizational climate variables refer to the interaction between staff and administrators within educational social systems, i.e. schools.

The field of communication research has produced many conceptual variables which are linked to innovativeness (Rogers, 1962). Among these variables is the degree to which members of a social system have access to sources of information outside that social system, or cosmopoliteness. Another of these communication variables is the degree to which a leaders' opinion is sought by members of the social system, or opinion leadership.

A detailed definition of each of these variables is continued in Chapter III.

The present study is an investigation of the relationships between innovativeness and certain demographic, organizational climate and communications variables in the intermediate school districts of Michigan.

The Population

The intermediate school district in Michigan is an educational administration unit which serves as a link between the State Department of Education and local school districts. The organization and functions of the intermediate school district are discussed at length later in this study.

Because Michigan Intermediate School Districts have the power to levy a tax earmarked to be used for special education programs, and employ large numbers of professional special educators, they could influence the growth of educational programs for handicapped children. Very little research has focused upon this resource. Therefore this study uses the intermediate school districts as the population for the investigation of the relationship between innovativeness and the variables mentioned above.

Strategy and Purposes

This is a correlational study which investigates the relationships between innovativeness and certain communication, organizational climate, and demographic variables.

The major purpose of this study is to attempt to answer the following questions:

1. Are communications variables related to the adoption of innovative special education

programs, practices, and procedures in Michigan Intermediate Departments of Special Education?

2. Are organizational climate variables related to the adoption of innovative special education programs, practices, and procedures in Michigan Intermediate Departments of Special Education?

The secondary concern of this study is to attempt to answer the following questions:

1. Do the generalizations generated by previous research in diffusion of innovations apply to special education practices, procedures, and programs?
2. Do the generalizations generated by previous research in diffusion of innovations apply to special education departments of intermediate school districts in Michigan?
3. Does the research on organizational climate variables generalize to special education departments of intermediate school districts in Michigan?

Value of the Study

Although demographic, organizational climate, and communications variables appear to offer clues to the variance in the adoption rate of special education programs, no one really knows if these variables are indeed responsible for this variance or to what degree each

variable may contribute to this variance. Educators, convinced of the need for programs for exceptional children, need to know what specific factors will influence and expedite the development of such programs. With a knowledge of these specific factors, educational leaders will be better able to plan and facilitate adoption of educational programs for exceptional children. This study is designed to provide information which may assist educators to accomplish this important task.

In addition, this study should effect the generalizability of two fields of research. The investigation of the relationships between innovativeness and communications variables are based upon generalizations from research in diffusion of innovations (Rogers, 1962, pp. 311-315). These generalizations are based on research which has been conducted primarily in the area of rural sociology. The use of the relationships contained in these generalizations in this study should increase the knowledge of their application to a larger population.

The organizational climate factors used in this study are equivalent to the factors derived from the original Organizational Climate Description Questionnaire (OCDQ), (Harris, 1966). The original OCDQ factors were based on an elementary school population. In

subsequent studies, other populations have been used including secondary schools (McWilliams, 1967; Sargent, 1966) and nurses (Muliak, 1963). The present study uses the OCDQ with intermediate school district departments of special education in Michigan. Because the factors that emerged from the intermediate school district revision of the OCDQ are equivalent to the original OCDQ factors, this study enlarges the generalizability of OCDQ research to include intermediate school district departments of special education in Michigan.

Overview

The remainder of this thesis is organized in the following manner:

In Chapter II, the pertinent literature is reviewed.

In Chapter III, the population and the method used in this study, the results of the factor analysis of the Revised Organizational Climate Questionnaire, and the comparison with the original OCDQ are presented. The Communication Variable Questionnaire and the Intermediate School District Innovativeness Scale are explained.

Chapter IV contains the results of the analysis of the relationships between innovativeness, and the OCDQ factors, communication variables, and demographic variables.

In Chapter V, a summary of the results of the study as well as the conclusions reached and implications for further study are presented.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

This chapter contains a review of research in two major fields which are related to this study. The first research in this review deals with the diffusion of innovations in the general field of communication research and in the field of educational research.

The second section in this review contains research which focuses on organizational behavior. Specific subsections of this research discuss leadership behavior and the development of organizational climate concepts in educational research.

Diffusion of Innovation Research

In Diffusion of Innovations, Rogers (1962), defines the basic vocabulary in the study of how new ideas spread as follows:

There are four essential elements in any analysis of the diffusion of an idea: (1) the innovation, and (2) its communication from one individual to another, (3) in a social system, (4) over time. An innovation is an idea perceived as new by the individual. Diffusion is the process by which an innovation spreads. The diffusion process is the spread of a new idea from its source of invention or creation to its ultimate users or adopters. A social system is a population of individuals who

are functionally differentiated and engaged in collective problem solving behavior. Adoption is a decision to continue full use of an innovation. The adoption process is the mental process through which an individual passes from first hearing about an innovation to final adoption. Innovativeness is the degree to which an individual is relatively earlier in adopting new ideas than other members of his social system. (pp. 19-20)

The present study focuses on the second and third elements in the diffusion of innovations i.e. communication between individuals within a social system, and the social system itself, i.e. Intermediate school districts.

Rogers (1962) discusses concepts used in the present study. Opinion leadership is the extent to which a leader within a social system is sought as a source of information, particularly about new ideas. Opinion leaders exert influence upon the members of the social system and effect the adoption of new ideas. The concept of opinion leadership is related to the concept of a two-step flow of information model. In the two-step flow of information model, information comes into the social system through a leader and is disseminated by the leader to the other members of the social system (Rogers, 1962, pp. 211-214).

Opinion leadership has been linked to innovativeness in several studies (Rogers, 1962, p. 184), and generalizations have been developed concerning the relationship between opinion leadership and other communication variables. One generalization based on the results of

previous research in communications is that the earlier one adopts a new idea, the greater is his opinion leadership. It is also generalized that the greater the opinion leadership of a person, the greater is his influence within the social system.

The concept of cosmopolitanism is also discussed by Rogers (1962, pp. 182-184). The concept of cosmopolitanism deals with the use of sources of information that are outside the social system. The more cosmopolitan a person is, the more sources of information outside the social system he has. In the present study cosmopolitanism is measured in terms of the number of days that the director and/or staff spend outside the intermediate school district attending professional conventions, conferences, or meetings. The generalization developed around the concept of cosmopolitanism is that early adopters are more cosmopolitan than later adopters, or the more innovative one is, the higher will be his cosmopolitanism.

The relationship between financial factors and innovativeness is also discussed by Rogers (1962). The more innovative a person is, the better off, financially, he tends to be. This generalization will also be investigated in the present study.

Time of adoption is an important factor in the determination of innovativeness. Generally, the earlier

one adopts a new idea, the more innovative he is considered to be. The following three generalizations concerning innovativeness (Rogers, 1962) are investigated in the present study:

1. Earlier adopters have a more favorable financial position than later adopters.
2. Earlier adopters are more cosmopolite than later adopters.
3. Earlier adopters have more opinion leadership than later adopters. (p. 313)

A study closely related to the present study was conducted by Davis (1965). Davis' study concerned the relationship of personal and organizational variables to the adoption of educational innovations in midwest liberal arts colleges.

Davis used a population of 136 private liberal arts colleges in the midwestern states. He sent a questionnaire containing 19 items which were identified by reviews of current literature as innovations. Each college was asked to indicate the status of innovative practices or programs in the following manner:

1. Adopted institution-wide
2. Adopted by a part of the institution
3. Under consideration for adoption
4. Not adopted and not under consideration

Scores of 3, 2, 1, and 0 respectively were assigned to these responses. Additional space was provided for each college to list other programs or practices which it had adopted and considered innovative.

When all of the questionnaires were received, the responses on the items were tabulated. Only those items which had been adopted by fewer than 50% of the liberal arts colleges surveyed were then considered as innovations. An innovativeness score for each liberal arts college was figured from that college's responses on the resulting 19 innovative items. This procedure is similar to the procedure for determining the innovativeness scores for the intermediate school districts in the present study. Davis selected one school from each extreme, i.e. one high innovative and one low innovative school, for further in depth study. This procedure is different from the procedure used in the present study where the entire population is used for the in-depth study.

Another study which investigated the differences between innovative and non-innovative social systems was conducted by Yadov (1967). Yadov compared a traditional village with a modern village in India. The elements of communication structure in informal social structure were analyzed. As in the Davis study the social systems were comparable on several important characteristics. The social systems were similar.

First, innovations studied were introduced by the same change agent at similar times. Second, the physical conditions and facilities were similar.

The concept of opinion leadership is incorporated into Yadov's study in the analysis of the relationships between information-givers and information-seekers in the traditional and modern villages.

The concept of cosmopolitanism was also used in the Yadov study. As suggested by Rogers (1962), cosmopolitanism is defined as communication contacts between members of a social system and sources of information outside the social system.

As in the Davis study, Yadov uses only an extreme example from each end of the continuum of the concept of innovativeness, i.e. one modern village versus one traditional village.

Innovativeness Research in Education

Educators have known or, at least, suspected that it took several years for an educational innovation to develop from its initial adoption to its complete adoption. Yet, not until Mort, et.al. of Teachers College, Columbia University began to publish studies on the adaptability and transition in American schools (Mort and Cornell, 1938 and 1941), did a systematic study of innovation in school systems emerge. The early studies dealt with identification of school children's

health problems, and health inspection by a school doctor. These studies showed that it required 50 years from the time of introduction of the practice until almost complete (90-100%) adoption. The study of the adoption of kindergartens (Mort and Cornell, 1941) supported the often-quoted belief that educational innovations took 50 years for the adoption process. This belief has been subsequently altered by studies of the adoption of driver education in 12 years and modern math in five years, (Carlson, 1964).

Mort (1964), summarized the findings of the previous half-century of research in the diffusion of educational innovations as follows:

1. Typically, an extravagantly long time elapses before an insight into a need (or a discovery that past practice is indefensible) is responded to by innovations destined for general acceptance in the schools. This period is measured in terms of decades . . .
2. The spread of an innovation through the American school system proceeds at a slow pace. This likewise must be measured in decades. It is very slow for a decade or so, very rapid for a couple of decades, and then very slow during the mopping-up period. Under extraordinary conditions, and with extraordinary expenditure of effort, the decades of invention and the decades of diffusion may be telescoped into months . . .
3. The rate of diffusion of complex innovations appears to be the same as that for simple innovations; innovations that increase cost move more slowly than those that do not.
4. During the slow early period of spread of an innovation, the innovation receives no recognition. Recent studies indicate that during this

early period the innovation is seen piecemeal; no one sees the forest which comprises the trees. Its rapid spread follows recognition of the inclusive design . . .

5. Communities vary in the degree to which they take on new practices. Indications are that this is a community characteristic. A community that is slow to adopt one innovation tends to be slow to adopt others. A pioneer in one area tends to be a pioneer in other areas.
6. Explanation of the differences in educational adaptability of communities can be found in no small degree in the character of the population, particularly in the level of the public's understanding of what schools can do, and citizens' feeling of need for education for their children. This appears to set the posture of the community toward financial support, and toward what teachers are permitted to do and tends to shape the staff by influencing personnel selected and kept in the community.
7. The strength of these population factors appears to be in understanding and expectations. While understandings and expectations are somewhat associated with factors like occupation and education of parents (and of those in political power in the community), they can be altered. Thus, they would appear to offer one of the most responsive areas for administrative action, both to capitalize on good understanding and expectations where they are not present.
8. It may be hypothesized that a far stronger school is now in the making, and that its threads are present in every community of any size. As the image becomes clearer, the threads that fit the pattern will prosper With clarification of the image, diffusion through most of the country's school systems will occur rapidly, regardless of what the cost implications may prove to be.
9. The golden strand among the bundles of haywire about us would appear to be adoption of responsibility by the school that all children

shall learn, and the giving up of the guiding principle of offering opportunity that was adequate for the 19th century . . . (pp. 325-327)

Mort offers three suggestions as guides to innovators. First, any meaningful evaluation of an innovation must include the effect of the innovation, overt and covert, upon the entire system into which it is introduced.

Second, the realization that the diffusion of an innovation is very slow whether it is among school systems or among individual teachers in one school. This knowledge would serve to prevent abandonment of a good idea before it has had a sufficient chance to become established.

Third, Mort suggests that when an innovation appears to be spreading even more slowly than expected, the value of that innovation and the effort necessary to obtain normal adoption should be carefully evaluated.

Research in the diffusion of educational innovations has continued since the initial thrust by Mort, et.al. The following are examples of studies which have investigated the relationship between size and financial variables and innovativeness.

Richland (1968) attempted to define an operational index of innovativeness for school administrators. In his study, Richland concluded that the two factors which had the highest relationship with innovative behavior

were urbanity and teachers' salaries. Urbanity was defined as the concentration of population with the greater concentrations associated with innovativeness. The higher average teacher's salary was also related to more innovative behavior.

Similar findings have been reported by others (Breivogel, 1967; Preising, 1968; Spencer, 1967). Breivogel isolated several factors which contributed significantly to the variance in the adoption of educational innovations in New Jersey public school districts. These significant factors were, in order of importance: Superintendent's salary, average teacher's salary, district size, i.e. enrollment, teachers' salaries per pupil, per pupil expenditures, and the number of staff per 1000 pupils. These six factors accounted for 33 per cent of the variance in innovativeness with the superintendent's salary accounting for 29 per cent alone.

Preising (1968), in addition to investigating the relationships between innovativeness, staff tenure and administrative succession, also studied per pupil expenditure and the size of schools and school districts. Innovativeness in this study dealt with the adoption of structural innovations, such as use of teacher aides, team teaching, class size variation, and length of class periods. Preising concluded that per pupil expenditure

made a significant difference in innovativeness, but staff tenure and the size of school districts did not make a difference.

Further support for the idea that financial variables and population, of district variables, are important in the diffusion of educational innovations, comes from the study of constituent school districts within one intermediate school district in Michigan. Spencer (1967) studied the relationships between 54 district and superintendent variables and the degree of adoption of 52 educational innovations. He found that 23 factors made a significant difference in the adoption of innovations. Among these factors were salary of the superintendent, population of the district, per pupil cost of operation, school census density, and geographic size of the school districts. Spencer concluded that characteristics of the superintendent and wealth of the school district were excellent predictors of innovativeness. The salary of the superintendent, educational level of the superintendent, and per pupil revenues from Federal grants accounted for 71 per cent of the variance in innovativeness.

The evidence from the above studies suggests that size and financial factors are related to the adoption of educational innovations. Because of this evidence these factors are included in the present study.

Intermediate School Districts

Spencer's study is also related to the present study because of its investigation of the role of the intermediate school district office in the adoption process. Interaction between local school district personnel and the intermediate office were concluded to be good predictors of innovativeness. Spencer also concluded that the Oakland Intermediate School District office provided significant leadership in the introduction of new practices in its local constituent school districts.

Spencer's study is important because it was the only study found by this researcher that used intermediate school districts in Michigan as the population in the study of innovativeness. Even though the focus of Spencer's study was the innovativeness of local school districts within a particular intermediate school district, it strongly suggests that the intermediate school district plays an important role in the adoption of educational innovations.

Another study which focuses on Michigan Intermediate School Districts deals only indirectly with the concept of innovativeness (Osborne, 1969). This study attempts to construct a model for intermediate school districts to use in the development of instructional improvement services. Chapter II of Osborne's

study provides an excellent history of the development of intermediate school districts in the United States. Osborne found that 32 states have some provision for a unit of educational administration functioning between state and local levels but there is an apparent lack of research dealing with this type of administrative unit. He concluded that more research is needed to help define the functions and problems of intermediate school districts. This position is also supported by a series of formal resolutions adopted by the American Association of School Administrators since 1954. These resolutions stress the importance of the study of intermediate school districts (Isenberg, 1967).

The present study is an attempt to contribute a better understanding of the function and problems of intermediate school districts in the adoption of special education programs to meet the educational needs of handicapped children.

Research in Leadership Behavior

Prior to 1947, the focus of research on leadership was on the personal characteristics or personality traits of persons who were judged to be effective leaders. Leadership studies were summarized by Jenkins (1947), who came to three conclusions on the basis of the research prior to that time. First, no single trait or group of characteristics had been isolated which sets off the

leader from the members of his group. Second, leadership is specific to the particular situation under investigation. Jenkins' third conclusion was that leaders tend to exhibit certain characteristics in common with members of their group, especially interests and social background. This conclusion relates to the parallel finding in communication research of the principle of homophily. Homophily is the tendency for those persons who are similar to interact (Rogers, 1962, p. 233).

These conclusions were reached by other researchers and social scientists and lead to the development of a series of studies at Ohio State University. This research has focused on the behavior of leaders.

Stogdill (1948) also arrived at the conclusion that the trait approach to leadership is essentially untenable. He went on to explore methods of determining patterns of leadership behavior. The problem that faced leadership researchers was very apparent. There were no instruments for assessing leadership behavior.

The group of leadership researchers at Ohio State, (Hemphill, 1949; Hemphill and Coons, 1950; Harris, 1952; Fleishman, 1953; Halpin, 1955; Stogdill, 1957), have contributed much to the development of the Leadership Behavior Description Questionnaire (LBDQ). The LBDQ was constructed from ideas developed by many writers but principally by Hemphill and Coons et.al. (1950).

Leadership behavior is defined as the behavior of an individual who is involved in directing group activities. The dimensions of the LBDQ are "consideration" and "initiating-structure." The consideration dimension measures the amount and authenticity of the attention that the leader gives to the needs of his followers. The initiating structure dimension evaluates the degree to which a leader organizes the task to be accomplished. These two dimensions could be compared to staff oriented and task oriented approaches respectively.

The LBDQ has been used in several fields. In business and industry the LBDQ has been used in the evaluation of supervisory training programs, (Fleishman et.al., 1955; Harris, 1952), measurement of attitude of leaders (Fleishman, 1953), and evaluations of human relations training and supervisory behavior, (Fleishman, 1953). The LBDQ has also been used in military and educational leadership studies (Halpin, 1955).

The LBDQ was used in several studies which related to the leadership behavior of school superintendents, (Halpin, 1956, 1958, 1959). Halpin again emphasized the abandonment of the trait approach, the importance of leader-group relationship, and the influence of the institutional setting on leader behavior. Attention was focused on the administrator's responsibility of group accomplishment and group maintainance. These

responsibilities are directly related to the initiating-structure and consideration dimensions of the LBDQ. The influence of the institutional situation was of such magnitude that it lead to the development of an instrument to measure the climate of schools, (Halpin and Croft, 1962).

Organizational Climate Research

The concept of organizational climate has many facets. Climate is related to other terms such as situation, conditions, circumstances, and environment. These terms have been used by various sources to describe or explain the differences in behavior of individuals and groups when faced with similar problems or tasks.

Although each writer knows what he means by climate or environment and usually transmits at least a general understanding to the reader, there is a clear need to deal with environmental or climatic determinants in a systematic manner.

The Division of Research, Harvard Business School, has made an attempt to deal systematically with the concepts of environment and organizational climate, (Tagiuri and Litwin, 1968). Tagiuri states certain problems which must be solved before the concept of organizational climate can be used with any degree of

agreement on a definition. Tagiuri (1968), identifies the following four difficulties:

- a. distinguishing between the objective and subjective environment
- b. distinguishing between the person and the situation
- c. determining what aspects of the environment need to be specified
- d. identifying the structures and dynamics of the environment (p. 13)

In his discussion of the aspects of the environment, Tagiuri points out that the focus of investigation is generally the aspect in the situation which is of interest to the investigator. Since the specific aspects of the environment involve the individual interest of the investigator, "there is yet no useful set of definitions of environmental terms, nor have existing terms been used consistently" (p. 16).

Although there are many ways of defining climate, in every case it refers to some aspect of the situation which effects the behavior of an individual or a group. Tagiuri (1968) offers the following definition for Organization Climate:

Organizational climate is a relatively enduring quality of the internal environment of an organization that, (a) is experienced by its members, (b) influences their behavior, and (c) can be described in terms of values of a particular set of characteristics (or attributes) of the organization. (p. 16)

If we accept this definition of organizational climate, then our problem becomes one of operationalizing

the characteristics (or attributes) of the organization and of determining what variables should be studied.

Such an attempt is that of Halpin and Croft (1962). After being involved in the leadership behavior research reported earlier in this chapter, Halpin and Croft decided to construct an instrument which would measure certain aspects of the environment or organizational climate of schools.

Over 1000 items were screened and tested on elementary school populations until 64 items were finally selected to make up the Organizational Climate Description Questionnaire (OCDQ), (See Appendix A). The 64 items were factor analyzed using a principal component solution which yielded eighteen factors with eigen values greater than 1.00. A varimax rotational solution was then used to select the best eight orthogonal factors, (Halpin, 1966, pp. 154-158; Halpin and Croft, 1962, pp. 42-43).

The population used to establish the norms for the OCDQ consisted of 1151 respondents in 71 elementary schools chosen from six different regions of the United States.

The eight factors identified and incorporated into subtests are defined by Halpin and Croft as follows: (Halpin and Croft, 1962):

1. DISENGAGEMENT refers to the teachers' tendency to be "not with it." This dimension describes a group which is "going through the motions," a group that is "not in gear" with respect to the task at hand. It corresponds to the more general concept of anomie as first described by Durkheim. In short, this subtest focuses upon the teachers' behavior in a task-oriented situation.
2. HINDRANCE refers to the teachers' feeling that the principal burdens them with routine duties, committee demands, and other requirements which the teachers construe as unnecessary busy-work.
3. ESPRIT refers to "morale." The teachers feel that their social needs are being satisfied, and that they are, at the same time, enjoying a sense of accomplishment in their job.
4. INTIMACY refers to the teachers' enjoyment of friendly social relations with each other. This dimension describes a social-needs satisfaction which is not necessarily associated with task-accomplishment . . .
5. ALOOFNESS refers to behavior by the principal which is characterized as formal and impersonal. He "goes by the book" and prefers to be guided by rules and policies rather than to deal with the teachers in an informal, face-to-face situation. His behavior, in brief, is universalistic rather than particularistic; nomothetic rather than idiosyncratic. To maintain this style, he keeps himself-at least, "emotionally"-at a distance from his staff.
6. PRODUCTION EMPHASIS refers to behavior by the principal which is characterized by close supervision of the staff. He is highly directive and plays the role of a "straw boss." His communication tends to go in only one direction and he is not sensitive to feedback from the staff.
7. THRUST refers to behavior by the principal which is characterized by his evident effort in trying to "move the organization." "Thrust" behavior is marked not by close supervision, but by the principal's attempt to motivate the teachers through the example which he personally sets . . .

8. CONSIDERATION refers to behavior by the principal which is characterized by an inclination to treat the teachers "humanly," to try to do a little something extra for them in human terms. (pp. 40-41)

The scores on each of the above subtest factors were charted on profiles for each of the 71 schools. Halpin and Croft analyzed these profiles and found that there were similarities between groups of profiles. They classified the profiles of the 71 elementary schools into six Organizational Climates (Halpin, 1966, pp. 174-181). The six organizational climates were thought of as occupying various positions on a continuum from "open" to "closed." The six organizational climate types are as follows: open, autonomous, controlled, familiar, paternal, and closed. Since the present study is concerned only with the subtest scores, the six organizational climates will not be discussed further here.

Each item of the OCDQ is a description of staff or principal behavior. (See Appendix A). Each respondent is asked to indicate the frequency of the indicated behavior in his school according to the following scale: (Halpin, 1966, p. 146):

1. Rarely occurs
2. Sometimes occurs
3. Often occurs
4. Very frequently occurs

The scores on each subtest were then standardized so that they had a mean of 50 and a standard deviation of ten.

The reliability of the OCDQ subtest was measured by three methods. The first method of determining reliability was the split-half method. The second method was the comparison of even and odd numbered respondents scores. The third estimate was obtained by computing the test score communalities from the three factor rotational solution of the eight subtests. Since high communality can only occur when there is equivalence, the communality was interpreted as a coefficient of equivalence.

Using all three methods of estimating reliability, the OCDQ subtests were determined to be sufficiently dependable (Halpin and Croft, 1962, p. 65).

The validity of the OCDQ has been tested in several ways. Non-participant observers have been used to rate schools on each of the subtest factors (McFadden, 1966). The ratings by the non-participant observers were compared to the actual subtest scores and were not statistically different.

Another approach to the validity of the OCDQ has been to compare other scales which purport to measure similar concepts (Andrews, 1965). The comparisons have been made between the OCDQ factors and the LBDQ, the

Myers-Briggs scale, teacher satisfaction scale, related principal effectiveness scales, and school achievement index. The conclusions of Andrew's study were that the overall climate designations of "open" and "closed" do not predict that which is not better predicted by the eight subtests and, that the subtests of the OCDQ are reasonably valid measures of important aspects of the principal's relationship with his staff.

The most direct approach to validation of the OCDQ is through replication of the original study (Vanderlain, 1968; Brown, 1965). In these studies factor analyses were used which produced essentially the same factors and factor loadings for items as the original OCDQ study. In addition Vanderlain correlated the esprit subtest with a Morale Tendency Score (MTS). This correlation was significant at the $p < .01$ level. Morale of teachers as measured by the Chandler-Mathis Morale Inventory has also been compared to the OCDQ (Koplyay, 1966). This study found that the morale level of seventeen elementary schools was highly related to the Esprit factor in these schools.

The OCDQ was developed in a study of 71 elementary schools. The norms were based on that population. Halpin states that whether used in school, military units or hospitals, he would expect to see the same factors and profiles develop, (Halpin, 1966, 132).

The OCDQ has been used in a study of nurses in a hospital setting by Mulaik (Halpin, 1966, p. 132). The OCDQ was found to be applicable to the hospital setting. Secondary schools have also been used as the population in OCDQ studies (Sargent, 1966; Andrews, 1965; Tanner, 1966). These studies show that although secondary schools tend to have a more closed climate than elementary schools, the OCDQ is appropriate for measuring the climate of secondary schools.

Comparisons have also been made of the applicability of the OCDQ to urban and rural school settings (Tanner, 1966; Flanders, 1966). The urban schools most frequently had perceived "open" climate while rural schools tended to have more "familiar" climates. However, in either case, the OCDQ appeared to be appropriate for measuring the climate of both urban and rural schools. The study of the relationships between socio-economic status of schools and the OCDQ has produced similar results (Virjo, 1965; Koplyay, 1966). Again the OCDQ was judged to be applicable in both high and low socio-economic school settings.

Race has been studied as it relates to organizational climate. Hinson (1965) found in a comparison of 65 white and 56 Negro schools in Georgia that the Negro schools were perceived as more negative in terms of organizational climate. Flanders (1966) found that

urban-white facilities most frequently perceived their schools as "open" while rural-white facilities perceived their schools as having a "familiar" climate. Rural and urban Negro facilities perceived their schools as having either a "paternal" or "closed" climate. Among white teachers, the tendency toward "openness" was directly related to increasing tenure while Negro teachers in all tenure categories tended to perceive their schools toward the "closed" end of the continuum.

Somewhat different results were obtained when the results of the eight subtests were examined (Hightower, 1965). In this study, Negro teachers experience more Disengagement; less Hindrance, equal Esprit, and much more Intimacy, than white teachers. Due to the subtest score difference in which all favored the "closed" end of the continuum for Negro schools, Hightower seriously questioned the effects of a segregated society on the organizational climate of schools.

The relationship between OCDQ scores and size of the school has been investigated in both elementary and secondary schools. Cook (1965) found that the smaller the elementary school staff, the more "open" was the climate; conversely, the larger the staff size, the more "closed" the climate. In a similar study Cole (1965) looked at the subtest scores and their relationship to elementary school size. He found that schools with from two to

four teachers per age level appeared to be associated with higher Esprit and less Disengagement and Hindrance and probably represented the optimum sized schools in terms of organizational climate. However, the size of school did not appear to be related to the principal's Aloofness, Production emphasis, Trust or Consideration. In apparent contradiction to the two previous studies, McWilliams (1967) found that the school size did not make a significant difference in organizational climate of nine high schools. The above studies are of interest as they relate to the population factor used in the present study as a measure of size of intermediate school districts.

Personal factors relating to teachers and principals have received attention in many OCDQ studies. More experienced, older and more stable faculties are associated with open climates while faculties with a high percentage of young, inexperienced, or new teachers appear to suffer from high Hindrance and low Esprit (Cook, 1965; Hightower, 1965).

Teachers' attitudes toward students have been studied in samples of relatively open and closed climates (Blair, 1966). She found that when schools were grouped by their OCDQ classification, there were differences in the means scores of the attitude towards students, as measured by the Minnesota Teacher Attitude Inventory.

The relationship between OCDQ score and recognized personality inventories have been explored in several studies. No difference was found in the Cattells 16 Factor Personality Questionnaire and extreme categories of leader behavior (Bell, 1968). The mean scores of the Minnesota Teacher Attitude Inventory were found to be significantly higher in the most "open" climate schools than in other climates (Null, 1965). Individual teacher personality, as measured by the Myers Briggs Type Indicator was found to have an impact upon teachers' perceptions of climate and on satisfaction level (Collins, 1965).

Other personality factors, such as job satisfaction (Hamlin, 1966; Collins, 1965), teacher self-concept (Brust, 1966), dogmatism (Kirk, 1965; La Guttuta, 1966), psychological health (Ford, 1966) and other factors (Anderson, 1964; Murphy, 1966), have been found to be related to either OCDQ climates or subtest scores.

Sociometric methods have been used to subdivide larger groups into subgroups for comparison with OCDQ responses (Anderson, 1965).

OCDQ in Diffusion of Innovations Research

The combination of the OCDQ with the study of educational innovations is of particular interest because of the focus of the present study on this combination of factors.

Both the LBDQ and OCDQ were used by Roosa (1968) in a study of the adoption of educational innovations. Roosa found no significant relationships between the rate of adoption of educational innovations and openness of climate. However, he did find significant relationships between rate of adoption and expenditure per pupil; between age of administrator and Consideration score (the older the administrator, the less consideration); and between rate of adoption and length of administrator's experience (the higher the adoption rate, the greater his experience).

Marcum (1969) had the Oregon State Department of Education staff rate the most and least innovative schools in the state. He then chose a sample of 15 schools from each extreme of innovativeness. In comparing these samples on OCDQ scores, significant differences were found between "open" and "closed" climate schools on innovativeness.

Innovativeness was also significantly related to age, (the younger staffs were more innovative); to experience, (the less experienced staffs were more innovative); size of staff, (larger staffs were more innovative).

A third study investigates the role of the principal in the adoption of innovative instructional practices (Peach, 1967). In this study the OCDQ was

used to identify the climate of 35 schools. The adaptability of the schools or the Adaptive-Conventional Orientation (ACO) was measured and scores on the ACO were compared by climate type. No significant relationships were found between OCDQ subtest scores or climate profiles and local ACO scores. However, the "autonomous climate" and the Hindrance subtest were significantly related to total ACO scores. Peach concluded that the concept of "openness" of the system was not substantiated as a factor contributing to adaptability.

Peach's study points out the limited usefulness of the global concepts of climate but gives some evidence that OCDQ subtest scores were useful, in predicting adaptability or innovativeness.

Summary

Research in the diffusion of innovations and organizational climate have been reviewed in this chapter. Innovativeness, the key concept in the present study was defined as the extent to which a social system or individual adopts new ideas or programs prior to their adoption by other similar social systems. Opinion leadership refers to the extent to which the opinions of a person within a social system is sought by other members of that social system. The concept of cosmopolitanness refers to the extent to which

sources of information external to the social system are used by members of the social system.

The following generalizations taken from previous diffusion of innovation research and which will be investigated by the present study were discussed:

1. Earlier adoptors have a more favorable financial position than later adoptors.
2. Earlier adoptors are more cosmopolite than later adoptors.
3. Earlier adoptors have more opinion leadership than later adoptors. (Rogers, 1962, p. 313)

Studies are reviewed which suggest that relationships exist between innovativeness and cosmopolitaness, opinion leadership, financial factors, and size factors within social systems in general and educational systems in particular.

The literature concerning research in intermediate school districts is very scarce. However, two studies are reported in this chapter. One study (Osborne, 1969) stresses the importance and lack of research concerning the problems and functions of intermediate school districts, while the other (Spencer, 1967) is an investigation of innovativeness within the constituent school districts in one Michigan Intermediate School District.

Leadership behavior research is reviewed as an antecedent to the development of organizational climate research. Most of the leadership behavior research was

done at Ohio State University during the late 1940's and through the 1950's.

The major thrust of organizational climate research in education has been by Halpin and Croft (1962). Their development of the Organizational Climate Description Questionnaire (OCDQ) is discussed in detail. Each of the subtests of the OCDQ defined and the scoring procedure is explained.

The validity of the OCDQ has been tested by correlation studies with other measures which purport to measure the same concepts. Several of these studies are reported. In addition studies which relate OCDQ factors with race, size of school, personality traits of staff and administrators, and socio-economic setting are discussed.

Finally, the use of the OCDQ in innovation research is reported. These studies show relationship between organizational climate variables and the innovativeness of schools and school districts.

CHAPTER III

METHODOLOGY

Introduction

In this chapter the methodology of this study is presented. The definition and composition of the population is reported in considerable detail. The instruments used in the study are described and the methods of scoring explained.

The specific nature of the problem investigated is presented through operational definitions of the variables used in this study and the presentation of 17 testable hypotheses.

The treatment of the data is explained with reference to the computer programs and types of analysis used during various phases of data processing for this study.

Population

Intermediate School Districts

The population for this study consists of the special education departments of intermediate school districts in Michigan. For the purpose of this study, intermediate school district special education personnel will be referred to as departments of special education. Intermediate

School District is defined as an educational administrative unit functioning between the state and local level under the provisions of Michigan's Public Act 18 of 1954 and Public Act 190 of 1962.

The population is further restricted in two ways. First, only those intermediate districts were selected which levy a special education tax under Public Act 190 of 1962. This requirement insured that every intermediate district in the population had a similar financial structure. The second requirement for inclusion in the population was that the intermediate district employ a director of special education.

For the purpose of this study, the Director of Special Education is defined as an educator employed by an intermediate school district who: (1) administers or supervises special education programs on a full time basis (2) meets the requirements for certification as a director of special education set by the State of Michigan and (3) for whom the intermediate school district receives reimbursement from the State of Michigan. The requirement that the director be reimbursed by the State insures that the director has full time responsibility for the operation of the intermediate department of special education.

All the intermediate school district special education departments in Michigan as defined above are used in this study except for one in which the director of special

education was ill for an extended period and an adequate basis for staff-director interaction was not available. Twenty-nine directors and four hundred ninety-one (491) special education staff members are included in the study.

Table 1 lists the intermediate school districts which participated in this study along with basic data for each district. The number of participating staff members from each intermediate school district special education department ranged from three to 74.

Population Base is defined as the total number of public and private school students in grades K-12 in constituent districts within each intermediate school district. The intermediate school districts in the population had a wide range in their number of resident school-age students, from 8,206 to 264,359.

The financial status of the intermediate school districts in the population also varied widely. The state equalized evaluation (SEV) of property within each intermediate district varied from a low of \$28,152,350 to a high of \$4,043,767,089 with a median of \$210,717,564 SEV.

The amount of authorized Public Act 18 millage (earmarked funds for special education) ranged from .5 mills to 2.0 mills with the median and mode P.A. 18 millage of .75 mills. These financial differences will be discussed later in this chapter in the definition of financial base school-age population.

TABLE 1.--Basic data on Michigan Intermediate School districts participating in this study.

| Name of Intermediate School District | Number of staff Participating | School-age Population | State Equalized Valuation | Pub. Act 18 Millage rate Authorized | Pub. Act 18 funds per Child |
|--------------------------------------|-------------------------------|-----------------------|---------------------------|-------------------------------------|-----------------------------|
| Bay-Arenac | 13 | 37,347 | \$ 509,752,387 | .75 | \$10.24 |
| Berrien | 15 | 49,043 | 614,863,482 | .75 | 9.40 |
| Branch | 12 | 8,805 | 105,213,018 | 1.75 | 20.91 |
| Calhoun | 10 | 39,989 | 495,582,415 | .50 | 6.20 |
| Charlevoix-Emmet | 15 | 11,235 | 199,295,798 | .50 | 8.87 |
| Delta-Schoolcraft | 11 | 13,760 | 129,847,969 | 1.00 | 2.05 |
| Dickinson-Iron | 6 | 10,586 | 126,400,400 | .50 | 1.67 |
| Eaton | 13 | 18,137 | 182,412,166 | 1.00 | 10.06 |
| Genesee * | 15 | 87,220 | 1,061,962,708 | .50 | 6.09 |
| Hillsdale | 10 | 9,223 | 102,458,852 | 1.00 | 11.11 |
| Huron | 11 | 10,492 | 171,964,744 | .50 | 8.20 |
| Ingham | 33 | 68,412 | 1,077,516,800 | 1.75 | 27.56 |
| Ionia | 8 | 15,085 | 136,577,174 | .50 | 4.52 |
| Isabella | 3 | 8,206 | 92,004,559 | .75 | 8.41 |
| Jackson | 29 | 39,848 | 497,732,017 | 1.50 | 18.74 |
| Kalamazoo Valley | 14 | 50,120 | 833,081,004 | 2.00 | 33.24 |
| Kent | 74 | 120,069 | 1,518,961,871 | .50 | 6.33 |
| Lenawee | 22 | 23,901 | 314,667,987 | .50 | 6.58 |
| Livingston | 18 | 13,984 | 191,304,471 | .75 | 10.26 |
| Marquette-Alger | 19 | 20,797 | 176,847,857 | 1.00 | 8.50 |
| Monroe | 3 | 34,258 | 412,067,794 | .50 | 6.01 |
| Montcalm | 7 | 13,759 | 169,702,354 | .50 | 6.17 |
| Oakland | 50 | 264,760 | 4,043,767,089 | 1.00 | 15.27 |
| Ottawa | 14 | 37,359 | 448,834,733 | .50 | 6.01 |
| Saginaw * | 20 | 42,458 | 478,487,747 | .75 | 8.45 |
| Shiawassee | 21 | 19,249 | 196,546,646 | 1.50 | 15.32 |
| St. Joseph | 16 | 13,826 | 209,083,312 | 1.00 | 15.12 |
| Tuscola | 15 | 15,663 | 210,717,564 | .75 | 10.09 |
| Washtenaw | 23 | 49,609 | 1,006,627,988 | 1.00 | 20.29 |

*Figures exclude large cities which do not participate in Public Act 18.

For the purpose of this study, the variable of Financial Base is defined as the total amount of Public Act 18 funds authorized within the intermediate school district in fiscal year 1969-70 divided by the population base, e.g. total number of students K-12 within the intermediate school district. Financial base ranged from \$1.67 to \$33.24 of P.A. 18 funds per child.

The geographic distribution of the intermediate districts in the population is depicted in Figure 1. All major areas of Michigan are represented with three districts in the upper peninsula, two districts in the Northern Lower Peninsula, and the remainder of the districts in the middle and southern portions of the Lower Peninsula.

Each intermediate school district in the study was assigned a code number by selecting random numbers from a table (Walker and Lev, 1958, pp. 280-281). One district code number was altered because the random number assigned coincided with the district identification number assigned by the Michigan Department of Education. These random code numbers are used to identify school districts throughout the remainder of this study.

Intermediate Special Education Personnel

For the purpose of this study special education personnel is defined as those persons who are employed by the intermediate school district as directors, supervisors, diagnosticians, school social workers, speech

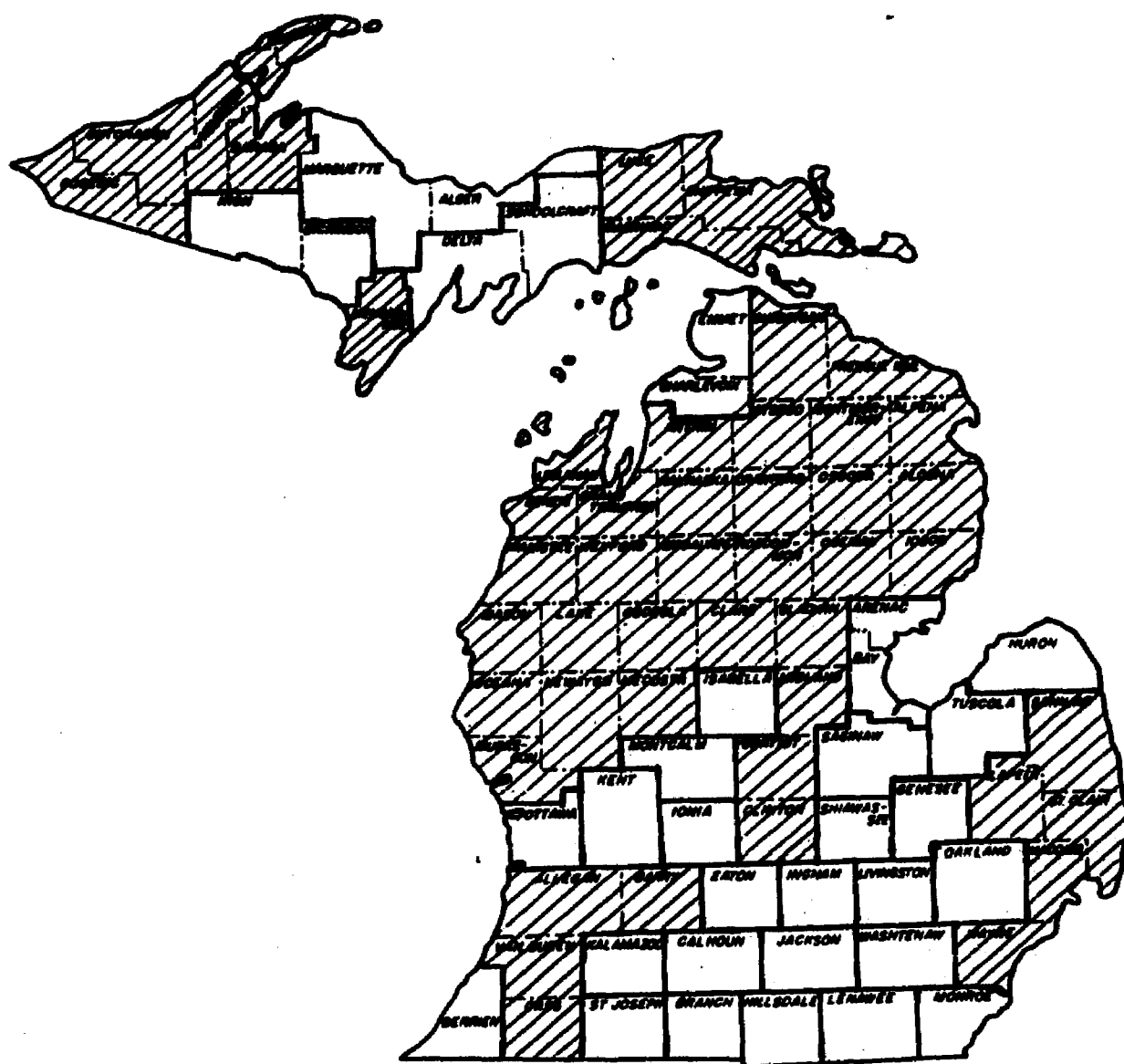


Figure 1.--Graphic Distribution of Population.

Note: Unshaded areas represent 29 Intermediate School Districts participating in this study.

correctionists, consultants for mentally handicapped (Type C), teacher consultants for the physically handicapped (Type 4), teachers of the homebound and/or hospitalized and other personnel including physical therapists, occupational therapists and consultants for the emotionally disturbed and consultants for learning disabilities.

In conjunction with the collection of the data used in the testing of the hypotheses of this study, a general biographical questionnaire was administered. The results of this questionnaire are reported in Table 2.

The ages of the special education personnel according to position are reported in Table 2. The mean age for all special education personnel is 37 years. The range of mean age for positions range from 30.3 for speech correctionists to 43.0 for teachers of the homebound and hospitalized.

Of the total special education personnel in this study, 40 per cent were male, while 60 per cent were female. The extremes of the distribution are represented by the directors, 90 per cent male, 10 per cent female, and teacher counselor for the physically handicapped (Type 4), 13 per cent male versus 87 per cent female. The mean number of years experience in the present position for the entire population is 4.6 years, with Type C consultants having the least, (2.8) and directors having the most experience in position (6.4).

TABLE 2

BIOGRAPHICAL INFORMATION ON STAFF MEMBERS

| Positions | Total No. Responding | Ages | | | | | Mean Ages |
|---|-------------------------|-------|-------|-------|-------|------------|--------------|
| | | 20-29 | 30-39 | 40-49 | 50-59 | 60 or over | |
| Directors | 29 | 1 | 14 | 12 | 0 | 2 | 40.7 |
| Supervisors | 25 | 4 | 12 | 6 | 3 | 0 | 33 |
| Diagnosticians | 74 | 13 | 36 | 15 | 7 | 3 | 38.3 |
| School Social Workers | 88 | 11 | 22 | 30 | 24 | 1 | 42.9 |
| Speech Correctionists | 128 | 96 | 23 | 14 | 3 | 2 | 30.3 |
| Type C Consultants | 33 | 7 | 13 | 4 | 6 | 3 | 40.2 |
| Teacher Consultants (Type 4) | 46 | 12 | 22 | 11 | 0 | 1 | 35.4 |
| Teachers of Homebound and/ or Hospitalized | 43 | 11 | 8 | 9 | 8 | 8 | 43 |
| Other | 54 | 20 | 17 | 14 | 2 | 1 | 35 |
| TOTAL | 520 | 165 | 167 | 114 | 53 | 21 | 37 |

| Positions | Total No. Responding | Sex* | | No. Years | | n Present Staff | | Mean No. of Years |
|---|-------------------------|------|-----|-----------|-----|-----------------|------------|----------------------|
| | | M | F | 0-3 | 4-9 | 10-19 | 20 or over | |
| Directors | 29 | 26 | 3 | 10 | 13 | 6 | 0 | 6.4 |
| Supervisors | 25 | 16 | 9 | 13 | 7 | 5 | 0 | 5.5 |
| Diagnosticians | 74 | 50 | 24 | 35 | 29 | 10 | 0 | 5.2 |
| School Social Workers | 88 | 36 | 52 | 43 | 32 | 8 | 0 | 4.5 |
| Speech Correctionists | 128 | 26 | 102 | 94 | 29 | 14 | 1 | 4.2 |
| Type C Consultants | 33 | 19 | 14 | 26 | 6 | 1 | 0 | 2.8 |
| Type 4 Consultants | 46 | 6 | 40 | 13 | 23 | 5 | 0 | 5.4 |
| Teachers of Homebound and/ or Hospitalized | 42 | 10 | 32 | 24 | 14 | 5 | 0 | 4.8 |
| Other | 54 | 20 | 34 | 34 | 18 | 1 | 1 | 3.8 |
| TOTAL | 519 | 205 | 314 | 292 | 171 | 55 | 2 | 4.6 |

| Positions | Total No. Responding | No. Years Experience in Education | | | | Mean |
|---|-------------------------|-----------------------------------|-----|-------|-------|------|
| | | 0-3 | 4-9 | 10-19 | 20-29 | |
| Directors | 29 | 1 | 7 | 15 | 5 | 14.4 |
| Supervisors | 25 | 2 | 5 | 13 | 4 | 14.1 |
| Diagnosticians | 74 | 16 | 21 | 32 | 4 | 10.2 |
| School Social Workers | 88 | 20 | 30 | 30 | 6 | 9.9 |
| Speech Correctionists | 128 | 59 | 42 | 23 | 4 | 6.2 |
| Type C Consultants | 33 | 2 | 11 | 15 | 3 | 12.9 |
| Type 4 Consultants | 46 | 4 | 17 | 24 | 0 | 10.8 |
| Teachers of Homebound and/ or Hospitalized | 43 | 8 | 11 | 7 | 14 | 14.4 |
| Other | 54 | 6 | 33 | 13 | 4 | 11.7 |
| TOTAL | 520 | 118 | 174 | 172 | 44 | 10.1 |

| | | No. Years Experience in Special Education | | | | | | | | | |
|--|-----|---|----|-----|----|-----|----|-----|----|-----------|----|
| | | 0-1 | % | 2-3 | % | 4-5 | % | 6-7 | % | 8 or over | % |
| Director | 29 | 1 | | 3 | | 2 | | 4 | | 19 | |
| Supervisors | 25 | 1 | | 2 | | 1 | | 5 | | 16 | |
| Diagnosticians | 74 | 12 | | 13 | | 14 | | 8 | | 27 | |
| School Social Workers | 88 | 14 | | 26 | | 15 | | 19 | | 14 | |
| Speech Correctionists | 128 | 32 | | 28 | | 29 | | 13 | | 26 | |
| Type C Consultants | 33 | 0 | | 4 | | 6 | | 12 | | 11 | |
| Type 4 Consultants | 46 | 1 | | 8 | | 7 | | 7 | | 23 | |
| Teachers of Homebound and/ or Hospitalized* | 42 | 9 | | 10 | | 4 | | 4 | | 15 | |
| Other | 54 | 6 | | 11 | | 12 | | 10 | | 15 | |
| TOTALS | 519 | 76 | 15 | 105 | 20 | 90 | 17 | 82 | 16 | 166 | 32 |

| | | Highest Degree Held | | | | | | | | | |
|---|-----|---------------------|-----|------------------|------|----------------|------|-------------------|------|------------------|------|
| | | Associate No. | % | Bachelors No. | % | Masters No. | % | Specialist No. | % | Doctorate No. | % |
| Directors | 29 | 0 | | 0 | | 24 | 82.8 | 2 | 6.9 | 3 | 10.3 |
| Supervisors | 25 | 0 | | 0 | | 22 | 88 | 1 | 4.0 | 2 | 8.0 |
| Diagnosticians | 74 | 0 | | 5 | 6.7 | 53 | 71.7 | 13 | 17.6 | 3 | 4 |
| School Social Workers | 88 | 0 | | 15 | 17.0 | 62 | 70.4 | 11 | 12.6 | 0 | |
| Speech Correctionists** | 126 | 3a | 2.4 | 82 | 65 | 40 | 31.8 | 0 | | 1 | .8 |
| Type C Consultants | 33 | 0 | | 9 | 27.3 | 23 | 69.7 | 1 | 3 | 0 | |
| Type 4 Consultants | 46 | 0 | | 14 | 30.4 | 30 | 65.2 | 1 | 2.2 | 1 | 2.2 |
| Teachers of Homebound and/ or Hospitalized** | 41 | | | 19 | 46.3 | 22 | 53.7 | 0 | | 0 | |
| Other | 54 | 0 | | 18 | 33.3 | 27 | 50 | 4 | 7.4 | 5 | 9.3 |
| TOTALS | 516 | 3 | .6 | 162 | 31.4 | 303 | 58.7 | 33 | 6.4 | 15 | 3 |

| | | Year Highest Degree Was Attained | | | | | | | | | |
|---|-----|----------------------------------|------|----------------|------|----------------|------|----------------|------|---------------------|------|
| | | 1968-69 No. | % | 1966-67 No. | % | 1964-65 No. | % | 1962-63 No. | % | 61 or before No. | % |
| Directors | 29 | 0 | | 4 | 13.8 | 8 | 27.6 | 4 | 13.8 | 13 | 44.8 |
| Supervisors | 25 | 2 | 8 | 4 | 16 | 5 | 20 | 6 | 24 | 8 | 32 |
| Diagnosticians | 74 | 17 | 23.0 | 12 | 16.2 | 13 | 17.6 | 10 | 13.5 | 22 | 29.7 |
| School Social Workers | 88 | 13 | 14.8 | 23 | 26.0 | 21 | 23.9 | 10 | 11.4 | 21 | 23.9 |
| Speech Correctionists# | 126 | 46 | 36.5 | 29 | 23.0 | 21 | 16.7 | 8 | 6.3 | 22 | 17.5 |
| Type C Consultants | 32 | 3 | 9.4 | 9 | 28.1 | 6 | 18.8 | 4 | 12.5 | 10 | 31.2 |
| Type 4 Consultants | 46 | 10 | 21.7 | 7 | 15.3 | 12 | 26.1 | 2 | 4.3 | 15 | 32.6 |
| Teachers of Homebound and/ or Hospitalized | 41 | 9 | 22 | 3 | 7.3 | 6 | 14.6 | 4 | 9.8 | 19 | 46.3 |
| Other | 54 | 16 | 29.6 | 15 | 27.8 | 5 | 9.3 | 4 | 7.4 | 14 | 25.9 |
| TOTALS | 515 | 116 | 22.5 | 106 | 20.6 | 97 | 18.8 | 52 | 10.1 | 144 | 28 |

* One person did not respond to this item.

** Two individuals did not respond to this item.

Two speech correctionists, one Type C Consultant, and two teachers of the homebound and/or hospitalized did not respond to this item.

* These Speech Correctionists are employed in an experimental program.

The mean number of years in education for the entire population is 10.1 with a high of 14.4 for directors and teachers of the homebound and hospitalized. The lowest mean of experience in education was 6.2 years for speech correctionists.

Table 2 also reports the number of years of experience in special education for each position category. Because the largest number of respondents had eight or more years of experience, the percentages were not figured for this table. The 166 persons who had over eight years of experience in special education represent 32 per cent of the respondents, while only 76 or 15 per cent of the respondents had one year or less experience in special education.

The majority (68.1 per cent) of special education staff members held at least a masters degree, with 3 per cent of the total population holding doctoral degrees. The three speech correctionists which were the only staff members with associate degrees were serving in an experimental program in one of the intermediate districts. All of the directors held at least a masters degree with 10.3 per cent having earned doctorates. The general education level of intermediate special education personnel is quite high.

Finally, Table 2 reports the years that the highest degrees were earned. It is interesting to note that the

directors and teachers of homebound and hospitalized have both the greatest number of years experience in education and the greatest per cent of their group obtained their highest degree on or before 1961.

Of the approximately 550 special education personnel of the 29 intermediate school district special education departments, 528 responded to the questionnaire. Eight answer sheets were discarded because of improper marking or because they were incomplete, leaving a total of 520 respondents used in the analysis of data in this study.

Instruments

Organizational Climate Description Questionnaire

One instrument used in this study is the Organizational Climate Description Questionnaire (OCDQ) (Halpin and Croft, 1962). The OCDQ was chosen for this study because it describes the characteristics of a group and its leader in behavioral terms. The OCDQ consists of 64 Likert-type items to which the special education staff and the director of special education respond. Each item is a description of either staff or director behavior. (See Appendix B.) The response is an indication of the frequency with which that particular behavior occurs. The responses and their weights are as follows:

| <u>Response</u> | <u>Weights</u> |
|----------------------------|----------------|
| 1. Very seldom occurs. | 0 |
| 2. Sometimes occurs. | 1 |
| 3. Often occurs. | 2 |
| 4. Very frequently occurs. | 3 |

The 64 questionnaire items are divided into eight subtest scales. Four of these subtests indicate group variables while four subtests indicate the behavior of the leader. The group subtests are Disengagement, Hindrance, Esprit, and Intimacy. The leader behavior subtests are Aloofness, Production Emphasis, Thrust, and Consideration. For the purpose of this study, the operational definitions of the OCDQ variables are as follows:

Disengagement is staff members' behavior in task-oriented situations which refers to the concept of "going through the motions." This variable is operationalized as the disengagement score on the OCDQ.

Hindrance is staff feelings that the director burdens them with routine duties. This variable is operationalized by the hindrance score on the OCDQ.

Esprit is morale, i.e. staff's feelings that their social needs are being met while having a sense of accomplishment on their job. This variable is operationalized as the esprit score on the OCDQ.

Intimacy is the staff's enjoyment of friendly social relations with staff members. This variable is operationalized by the intimacy score in the OCDQ.

Aloofness is the formal and impersonal behavior of the director of special education. This variable is operationalized by the aloofness score on the OCDQ.

Production Emphasis is highly directive, close supervision of the staff by the director of special education. This variable is operationalized by the production emphasis score on the OCDQ.

Thrust is behavior by the director which shows that he sets a good example for his staff or motivates his staff without close supervision. This variable is operationalized by the thrust score on the OCDQ.

Consideration is behavior of the director characterized as treating the staff humanly. This variable is operationalized by the consideration score of the OCDQ.

Scores for each subtest were obtained by totaling the weights for the responses to the items which comprised each subtest or factor. These factor scores were then transformed into standardized scores with a mean of 50 and a standard deviation of ten.

The OCDQ subtest scores for each special education staff were computed by averaging the scores of the staff members within each district. These scores are presented in Appendix G.

Factor Analysis

The OCDQ was standardized and normed on teachers and principals of 71 elementary schools. (See Appendix

A.) In order to adapt the OCDQ to special education departments of intermediate school districts, the wording of the items was altered. The intermediate special education departments version is presented in Appendix B. Because of the alteration of OCDQ items, this revision of the OCDQ was factor analyzed.

The factor analysis of the revised OCDQ had two steps. A principal components solution was run on the revised OCDQ items. The results of the principal components solution were then rotated toward simple structure by using a Varimax rotational solution. This solution produced the eight orthogonal factors present in the revised OCDQ. The factor loadings on the revised OCDQ items are presented in a Appendix D. This analysis is parallel to the statistical procedures used in the factor analysis of the original OCDQ (Halpin and Croft, 1962, pp. 154-165). The Intercorrelation matrix showing the relationships between each of the 64 items of the revised OCDQ is found in Appendix E.

The factor loadings for each revised OCDQ item were compared with the parallel factor loading for each original OCDQ item. This procedure was accomplished by the F-Match computer program of Bianchini and Kaiser (1964) provided by Educational Research Services Office of Michigan State University. The results of this

comparison determined that the revised OCDQ measured the same factors as the original OCDQ. (See Appendix F.) Since the original and revised OCDQ factors are statistically similar, the scoring procedure for original factors was processed through the Evaluation Services Office of Michigan State University.

Communication Variables Questionnaire

The Communication Variables Questionnaire (CVQ) was constructed by the author. The CVQ consists of 14 items which were designed to measure the communications behavior of the staff and the directors of special education departments in intermediate school districts. These items were designed to measure seven variables which have been linked with innovativeness in previous research (Rogers, 1962). These variables are contained in the communication generalizations and are defined as follows:

Interpersonal Sources of Information are persons with whom a staff member may communicate, i.e. Intermediate Director of Special Education, other intermediate special education staff, local special education personnel, non-educator lay persons, or State Department of Education Consultants. The interpersonal sources of information score is computed by totaling the responses on items 72 through 76 on the CVQ for each district and dividing that total by the number of respondents from that district.

Opinion Leadership is the degree to which the special education director's opinion is sought by others in discussing new ideas in special education; the number of times the director is mentioned by his staff in answering this question: "With whom do you discuss new ideas in special education? List three in the order of most often to least often discussion participant." The director's opinion leadership score is the total number of times mentioned divided by the number of respondents in that district.

Professional Involvement of Staff score is the total number of professional journals read regularly plus total number of professional organization memberships currently held, divided by the number of respondents from that district.

Cosmopolitaness of Staff score is exposure to outside influences. This score is the total number of days during 1968-69 school year in attendance at professional meetings divided by the number of staff members.

Professional Involvement of the Director score is the number of professional journals read regularly by the director plus the number of professional organization memberships currently held by the director.

Cosmopolitaness of Director score is the total number of days during 1968-69 school year in attendance at professional meetings by the director.

Professional Meetings are any meetings which have as their central focus the education of exceptional children such as conventions of professional organizations, conferences sponsored by State Department of Education, meetings of state-wide committees on special education.

Items 71 through 85 followed the OCDQ (Appendix B) and were used to determine the scores for these seven variables.

Appendix H presents the per cent of persons in each employment position who indicated for each source of information that it was an important source of new ideas in special education. Appendix I gives the sources of new ideas and the per cent of response within each intermediate special education department.

A summary of all the communication variables scores for each participating special education staff is found in Appendix J.

Intermediate School District Innovativeness Scale

The Intermediate School District Innovativeness Scale (ISDIS) was designed by the author to measure the innovativeness of special education departments in intermediate school districts. (See Appendix K.) The design of this instrument parallels the innovativeness scale used in a study of liberal arts colleges of the midwest (Davis, 1965) reviewed in Chapter II.

The ISDIS was constructed in the following manner. A panel of "experts" consisting of State Department of Education, Division of Special Education Consultants and Michigan State University Professors, produced a list of 28 innovative programs, practices, and/or procedures identified as applicable to an intermediate school district. This list of programs, practices, and/or procedures was submitted to the intermediate directors of special education. The directors indicated the status of each of the programs, practices, and/or procedures within their intermediate department of special education. Each item was marked according to the following possible responses:

1. Not aware of this program, practice, or procedure.
2. Aware of this program, practice, or procedure.
3. In trial or planning stage.
4. Fully adopted or in use.
5. Adopted previously but has been discontinued. Why?
6. This program, practice, or procedure is not applicable to this intermediate district. Why?

The number of responses for each program, practice, and/or procedure was calculated. Each item which had been adopted and was in use by less than 50 per cent of the intermediate school districts in the population was defined as an innovation. If response five or six was marked, the author evaluated the reasons listed why an item was either

"discontinued" or "not applicable" to that particular school district. Weights of one through four were reassigned for these items, based upon judgment of the author. As an example: if an item was judged to be truly not applicable to the district, that item was scored as if it were adopted and in use, (Weight 4).

Each intermediate school district was scored only on the 19 items defined as innovations. The weight for each response is as follows:

| <u>Response</u> | <u>Weight</u> |
|----------------------------|---------------------|
| 1. Not aware | 1 |
| 2. Aware | 2 |
| 3. Trial or planning stage | 3 |
| 4. Fully adopted or in use | 4 |
| <hr/> | |
| 5. Discontinued | 1-4 assigned by the |
| 6. Not applicable | author on the basis |
| | or reasons given. |

The innovativeness score for each intermediate department of special education is the total of all the weights from the 19 items defined as innovations. The innovativeness score for each intermediate department of special education is contained in Appendix L. The extent to which each of the 19 ISDIS items defined as innovations was adopted is presented in Appendix M.

Data Collection Procedures

The data for this study were gathered from two sources. Data on population base and financial base were taken from the records of the Michigan State Department of Education.

The OCDQ and CVQ were administered to the entire staff of the intermediate departments of special education in the population by the author or two investigators conducting simultaneous studies on the same population (Clark, 1970; Birch, 1970).

The instructions for the instruments were tested in a pilot study. This pilot study was conducted in an intermediate school district which did not meet all criteria for the population. This procedure showed that additional instructions were necessary. Therefore, a set of supplemental instructions were written. (See Appendix C.) These supplemental instructions were read aloud by the investigator after the general printed instructions had been read silently by each staff member.

The OCDQ and CVQ were administered to the special education personnel of each of the 29 intermediate school district between December 12, 1969 and February 6, 1970. Regular staff meetings were utilized for data gathering.*

* Due to scheduling of staff meetings and travel complications, the data in four intermediate departments was collected by staff members (two directors and two diagnosticians) who had been instructed by the investigators in the administration of the instruments. These two directors and two diagnosticians were responsible

Approximately 20 respondents who were absent from staff meetings completed the instruments independently and returned them by first class mail to the author.

After each respondent completed the questionnaires, he placed his own answer sheet in an envelope to insure his anonymity. Each respondent was asked to mark his questionnaires independently without consultation with other staff members. The responses to the revised OCDQ and the CVQ were recorded on mark sense answer sheets. These sheets were processed at the University Test Scoring Service at Michigan State University and the information punched on I.B.M. cards suitable for use with the CDC 3600 computer.

The Intermediate School District Innovativeness Scale was administered to each intermediate director of special education by the author or one of the other two investigators. This was done at the time of a personal visit to the district by one of the investigators.

Treatment of Data

The factors of the revised OCDQ are orthogonal due to the nature of the Varimax rotational solution. Since these factors are independent from each other, they were tested for their relationship with innovativeness by simple pairwise correlations (Hayes, pp. 566-577). The

for administration of the instruments and mailing the answer sheets to the author.

results of these comparisons yield a series of correlation coefficients for the relationship between each OCDQ factor and innovativeness.

An analysis of the data presented in Chapter IV shows that the demographic variables of population base and financial base were independent of each other and independent of the OCDQ variables. Therefore, the relationships between innovativeness and the demographic variables were also tested by simple pairwise correlations.

The communications variables used in this study were not tested to determine if they are orthogonal. Because we do not know if the seven communications variables are independent of each other, a multiple Linear regression analysis was used. The multiple regression solution allows the interpretation of the communications variables as a group to answer the question: "Given these communications variables, how well can innovativeness be predicted?"

In testing the relationship between these seven variables and innovativeness, the computer progressively eliminated the variable which contributed the least to the explanations of the variance in the dependent variable, i.e. innovativeness. The computer continued to delete variables until only the variables which were significant at the $p < .05$ level remained. The order with which the communications variables are deleted from

the regression formula is determined by the beta weights or the predictive value of these variables. The order of subsequent stepwise regression solutions was determined by successive elimination of the least predictive variables until the $p < .05$ level of significance is reached. The results of the multiple regression analysis* determined which of the communications variables contribute to the prediction of innovativeness and how much they contribute.

Hypotheses:

The hypotheses tested in this study are divided into three groups. Group I consists of hypotheses which state a relationship between innovativeness and demographic variables.

- H₁: The financial base of intermediate school districts is not correlated with the innovativeness of intermediate departments of special education in Michigan.
- H₂: The population base of intermediate school districts is not correlated with the innovativeness of intermediate departments of special education in Michigan.

The hypotheses relating to OCDQ variables were derived from the general hypothesis that high-innovative intermediate departments of special education will have

* This analysis of data was done with the Least Squares Deletion programs Description numbers seven and eight, Michigan State University Computer Laboratory Library on the Control Data Corporation 3600 Computer.

a profile similar to that on an "open" climate profile.
(Halpin, 1966, p. 136.)

- H₃: Disengagement is negatively correlated with innovativeness in intermediate departments of special education in Michigan.
- H₄: Hindrance is negatively correlated with innovativeness in intermediate departments of special education in Michigan.
- H₅: Esprit is positively correlated with innovativeness in intermediate departments of special education in Michigan.
- H₆: Intimacy is negatively correlated with innovativeness in intermediate departments of special education in Michigan.
- H₇: Aloofness is negatively correlated with innovativeness in intermediate departments of special education in Michigan.
- H₈: Production emphasis is negatively correlated with innovativeness in intermediate departments of special education in Michigan.
- H₉: Thrust is positively correlated with innovativeness in intermediate departments of special education in Michigan.
- H₁₀: Consideration is positively correlated with innovativeness in intermediate departments of special education in Michigan.

The hypotheses relating to communications variables were derived from generalizations based on the results of previous research in the diffusion of innovations.

(Rogers, 1962, pp. 311-315.)

- H₁₁: Use of mass media sources of awareness is positively related to innovativeness in intermediate departments of special education in Michigan.
- H₁₂: Use of interpersonal sources of awareness of innovations negatively related to innovativeness in intermediate departments of special education in Michigan.

- H₁₃: Opinion leadership of directors of special education is positively related to innovativeness in intermediate departments of special education in Michigan.
- H₁₄: Professional involvement of staff members is positively related to innovativeness in intermediate departments of special education in Michigan.
- H₁₅: Professional involvement of special education directors is positively related to innovativeness in intermediate departments of special education in Michigan.
- H₁₆: Cosmopolitaness of staff is positively related to innovativeness in intermediate departments of special education in Michigan.
- H₁₇: Cosmopolitaness of special education director is positively related to innovativeness in intermediate departments of special education in Michigan.

Summary

Presented in this chapter is the basic information concerning the composition of the Michigan Intermediate School Districts and the special education personnel that constitute the population for this study. Each of the characteristics is presented for the entire population and for each of the position category subgroups.

The development, administration, and scoring procedures for the OCDQ, CVQ and ISDIS are reviewed. The pilot study used to develop instructions and check administration procedures is reviewed. Operational definitions of the demographic, organization climate, and communication variables are presented. In addition, other terms crucial to the understanding of this study are defined.

The hypotheses for this study are stated in testable form. Two hypotheses deal with the relationship between innovativeness and demographic variables. Eight hypotheses postulate the relationship between innovativeness and the organizational climate variables. Seven hypotheses state the relationships between innovativeness and communications variables.

In the final section of Chapter III, the statistical procedures used for analysis of the data are presented.

CHAPTER IV

ANALYSIS OF DATA

Introduction

The data used in this study were analyzed on the CDC 3600 Computer, in the Michigan State University Computer Laboratory. The programs used for data analysis were supplied by the computer laboratory and are contained in descriptions five, seven, and eight in the Computer Center Library.

The units of analysis for each variable are the 29 intermediate school districts in the population. Based upon $n = 29$ statistical tables correlation values need to reach the significance level of $p < .05$ for one-tailed tests is $(r) = .323$ and for two-tailed tests is $(r) = .381$. Pearson Product Moment correlations are used to test the first ten hypotheses.

The data used in testing the hypotheses are found in the following locations. Innovativeness scores are located in Appendix L. Population base and Financial base figures are in Table 1 in Chapter III. OCDQ subtest scores are

located in Appendix G. Communication Variable scores are in Appendix J.

Results

Hypothesis 1

The financial base of intermediate school districts is not correlated with the innovativeness of intermediate departments of special education in Michigan.

The result of the correlation of innovativeness scores and financial base is shown in Table 3. The value of (r) did not reach the level required for significance for a two-tailed, non-directional hypothesis. Therefore, Hypothesis 1 is supported. Innovativeness and financial base are not significantly correlated.

TABLE 3.--Correlation between innovativeness and demographic variables.

| | Demographic Variables | |
|----------------|-----------------------|------------------------|
| | Financial Base (r) | Population Base (r) |
| Innovativeness | -.088 | .436* |

*Significant at $p < .05$, i.e. $(r) > .381$

Hypothesis 2

The population base of intermediate school districts is not correlated with the innovativeness of intermediate departments of special education in Michigan.

Table 3 shows that the value of the correlation coefficient between innovativeness and population base exceeded the level needed for significance. Therefore,

Hypothesis 2 is rejected. There is a positive significant correlation between population base and innovativeness.

Hypothesis 3

Disengagement is negatively correlated with innovativeness in intermediate departments of special education in Michigan.

Table 4 shows that value of (r) between innovativeness and Disengagement did not reach the level of significance for a one-tailed, directional hypothesis. Therefore, Hypothesis 3 is not supported. The relationship between innovativeness and Disengagement is not significant.

Hypothesis 4

Hindrance is negatively correlated with innovativeness in intermediate departments of special education in Michigan.

Table 4 shows that the value of (r) did not reach the level of significance for a one-tailed, directional hypothesis. Therefore, Hypothesis 4 is rejected. The relationship between innovativeness and Hindrance is not significant.

TABLE 4.--Correlations between innovativeness and staff OCDQ variables.

| | OCDQ Staff Variables | | | |
|----------------|----------------------|------------------|---------------|-----------------|
| | Disengagement (r) | Hindrance (r) | Esprit (r) | Intimacy (r) |
| Innovativeness | .129 | -.094 | .386* | .165 |

* Significant at $p < .05$ i.e. $(r) > .323$.

Hypothesis 5

Esprit is positively correlated with innovativeness in intermediate departments of special education in Michigan.

Table 4 shows the value of (r) exceeds the level of significance for a one-tailed, directional hypothesis. Therefore, Hypothesis 5 is supported. There is a significant relationship between innovativeness and Esprit.

Hypothesis 6

Intimacy is not correlated with innovativeness in intermediate departments of special education in Michigan.

Table 4 shows that the value of (r) did not reach the level of significance. Therefore, Hypothesis 6 is not supported. The relationship between innovativeness and Intimacy is not significant.

Hypothesis 7

Aloofness is negatively correlated with innovativeness in intermediate departments of special education in Michigan.

Table 5 shows the value of (r) did not reach the level required for significance. Therefore, Hypothesis 7 is not supported. Aloofness and innovativeness are not significantly related.

Hypothesis 8

Production Emphasis is negatively correlated with innovativeness in intermediate departments of special education in Michigan.

Table 5 shows that the value of (r) for Hypothesis 8 is not supported. The relationship between Production Emphasis and innovativeness is not significant.

TABLE 5.--Correlations between innovativeness and director OCDQ variables.

| | OCDQ Director Variables | | | |
|----------------|-------------------------|-------------------------------|---------------|----------------------|
| | Aloofness (r) | Production Emphasis (r) | Thrust (r) | Consideration (r) |
| Innovativeness | .033 | .138 | .363* | .125 |

*Significant at $p < .05$, i.e. $(r) > .323$.

Hypothesis 9

Thrust is positively correlated with innovativeness in intermediate departments of special education in Michigan.

Table 5 shows that the value of (r) for Hypothesis 9 exceeds the level required for significance for a one-tailed, directional test. Therefore, Hypothesis 9 is supported. Innovativeness and Thrust are significantly related.

Hypothesis 10

Consideration is positively correlated with innovativeness in intermediate departments of special education in Michigan.

Table 5 shows that for the correlation between innovativeness and Consideration scores, the value of (r) for Hypothesis 10 did not reach the level required for significance. Therefore, Hypothesis 10 is not supported. The relationship between innovativeness and Consideration is not significant.

Linear Regression Analysis

Hypotheses 11 through 17 are tested through a linear regression formula. Table 6 contains the Beta Weights and significance level of all seven communications variables before any deletions were made. The overall significance of the complete linear regression equation is $p = .206$ and no single variable in the original regression equation had a significance of $p < .05$.

The order in which the Communications Variables were eliminated from the linear regression equation and the resulting effect upon the amount of variance in innovativeness accounted for is given in Table 7.

Hypothesis 11

Use of mass media sources of awareness is positively related to innovativeness in intermediate departments of special education in Michigan.

Mass media sources of information was the second variable deleted from the linear regression equation because it did not contribute to the variance of innovativeness at the $p < .05$ significance level. Therefore, Hypothesis 11 is not supported. Use of mass media sources are not significantly related to innovativeness in intermediate special education departments in Michigan.

Hypothesis 12

Use of interpersonal sources of awareness of innovations is negatively related to innovativeness in intermediate departments of special education in Michigan.

TABLE 6.--Results of multiple linear regression analysis
of communications variables used
to predict innovativeness.

| Communication Variable | Hypothesis No. | Beta Weight | Significance Level |
|--------------------------------------|-------------------|----------------|-----------------------|
| Mass Media Sources | 11 | -.035 | .856 |
| Interpersonal Sources | 12 | .119 | .557 |
| Opinion Leadership | 13 | -.361 | .070 |
| Staff Professional Involvement | 14 | .381 | .073 |
| Director Professional Involvement | 15 | .166 | .437 |
| Staff Cosmopolitaness | 16 | -.033 | .868 |
| Director Cosmopolitaness | 17 | -.139 | .491 |
| All Communication Variables | 11-17 | | < .0005 |

Total amount of variance accounted for by original
regression equation $r^2 = .3404$.

TABLE 7.--Order of deletion of non-significant communication variables from the linear regression equation with the resulting alternation in r^2 and significance of the linear regression equation.

| Order of Deletion | Communication Variable | r^2 Before Deletion | Significance Level Before Deletion |
|-------------------|-----------------------------------|-----------------------|------------------------------------|
| 1 | Staff Cosmopoliteness | .3408 | .206 |
| 2 | Mass Media Sources | .3395 | .129 |
| 3 | Interpersonal Sources | .3380 | .073 |
| 4 | Director Cosmopoliteness | .3270 | .043 |
| 5 | Director Professional Involvement | .3192 | .020 |
| 6 | Opinion Leadership | .3068 | .009 |
| Not Deleted | Staff Professional Involvement | .1992 | .015 |

Use of interpersonal sources of information was the third communication variable to be deleted from the linear regression equation because it did not contribute significantly to the variance of innovativeness.

Therefore, Hypothesis 12 is not supported. Use of interpersonal sources of information is not related significantly to innovativeness in intermediate special education departments in Michigan.

Hypothesis 13

Opinion leadership of directors of special education is positively correlated with innovativeness in intermediate departments of special education in Michigan.

Table 7 shows that opinion leadership was the last non-significant variable to be deleted from the linear regression equation. The deletion of opinion leadership from the linear regression equation caused r^2 to drop from .3068 to .1992. This drop approached significance but did not reach significance at the $p < .05$ level. Even though opinion leadership did account for slightly over 10% of the variance in innovativeness, it did not reach the criterion level. Therefore, Hypothesis 13 is not supported. Opinion leadership is not related to innovativeness.

Hypothesis 14

Professional involvement of staff members is positively correlated with innovativeness in intermediate departments of special education in Michigan.

Professional involvement of the staff was the strongest and only communication variable to survive the deletion process. Table 6 shows that the beta weight for staff professional involvement was + .381. This variable accounts for 19.9 per cent of the variance of innovativeness which is significant at the $p = .015$ level. (See Table 7). Therefore, because the beta weight is positive and the level of significance meets the criteria of $p < .05$, Hypothesis 14 is supported. The professional involvement of the staff is positively related to innovativeness in intermediate special education departments in Michigan.

Hypothesis 15

Professional involvement of special education directors is positively correlated with innovativeness in intermediate departments of special education in Michigan.

The fifth communication variable to be deleted from the linear regression equation was the professional involvement of the special education director. This variable did not account for a significant amount of the variance of innovativeness. (See Table 7). Therefore, Hypothesis 15 is not supported. The special education director's professional involvement is not significantly related to innovativeness in intermediate special education departments in Michigan.

Hypothesis 16

Cosmopolitaness of staff is positively correlated with innovativeness in intermediate departments of special education in Michigan.

Table 7 relates that staff cosmopolitaness was the communication variable which contributed the least to the variance of innovativeness and was the first to be deleted from the linear regression equation. The significance level for staff cosmopolitaness did not meet the criteria. Therefore, Hypothesis 16 is not supported. Staff cosmopolitaness is not significantly related to innovativeness in Intermediate Special Education Departments in Michigan.

Hypothesis 17

Cosmopolitaness of special education directors is positively related to innovativeness in Intermediate Special Education Departments in Michigan.

Table 7 shows that director cosmopolitaness was the fourth communication variable to be deleted from the linear regression equation because it was not significantly related to innovativeness at the $p < .05$ level. Therefore, Hypothesis 17 is not supported. Cosmopolitaness of the special education director is not related significantly to innovativeness in intermediate special education departments in Michigan.

Summary

The hypotheses in this study postulated relationships between innovativeness and two demographic, eight

TABLE 8.--Summary of hypotheses.

| Hypotheses tested with simple correlations | | | | |
|--|---------------------------|---------------------------------|-------|-----------------|
| Hypothesis Number | Independent Variable Name | Type of Relationship Postulated | (r) | Result* |
| 1 | Financial Base | Null | -.088 | Not Significant |
| 2 | Population Base | Null | +.436 | Significant |
| 3 | Disengagement. | Negative | +.129 | Not Significant |
| 4 | Hindrance | Negative | -.094 | Not Significant |
| 5 | Esprit | Positive | +.386 | Significant |
| 6 | Intimacy | Positive | +.165 | Not Significant |
| 7 | Aloofness | Negative | -.033 | Not Significant |
| 8 | Production Emphasis | Negative | +.138 | Not Significant |
| 9 | Thrust | Positive | +.363 | Significant |
| 10 | Consideration | Positive | +.125 | Not Significant |

TABLE 8.--Continued.

| Hypotheses tested by linear regression equation | | | |
|---|-----------------------------------|--|-----------------|
| Hypothesis Number | Independent Variable Name | Type of Relationship Postulated (Beta Weights) | Result* |
| 11 | Mass Media Sources | Positive $-.035$ | Not Significant |
| 12 | Interpersonal Sources | Negative $+.119$ | Not Significant |
| 13 | Opinion Leadership | Positive $-.361$ | Not Significant |
| 14 | Staff Professional Involvement | Positive $.381$ | Significant |
| 15 | Director Professional Involvement | Positive $.166$ | Not Significant |
| 16 | Staff Cosmopolitaness | Positive $-.033$ | Not Significant |
| 17 | Director Cosmopolitaness | Positive $-.139$ | Not Significant |

* Significance level, $p < .05$

organizational climate, and seven communications variables. The results of the analysis of these relationships are summarized in Table 8.

Of the 17 hypotheses tested, four were significant at the $p < .05$ level. Of the two null hypotheses dealing with demographic variables, one was rejected. Hypothesis 2 postulated no relationship between the school-age population of an intermediate school district and the innovativeness of the intermediate special education departments. As a result of the rejection of this hypothesis, there appears to be a relationship between the number of school-age persons in an intermediate district and the number of innovative programs, practices and procedures adopted by the intermediate special education departments. The direction of this relationship is that the larger the population base, the more innovative the intermediate special education department.

Two of the eight directional hypotheses relating organizational climate variables to innovativeness were supported. Hypothesis 5 which postulates a positive relationship between the Esprit or morale of intermediate special education staffs and innovativeness of intermediate special education departments was supported. Hypothesis 9 was also supported. It postulates a positive relationship between the OCDQ variable of Thrust of the special education director and innovativeness of the

intermediate special education department in Michigan. Therefore, it appears that only two organizational climate variables, Esprit and Thrust, are related to the adoption of innovative special education programs, practices and procedures in intermediate special education departments in Michigan. The direction of these relationships is that the higher the Esprit and Thrust subtest scores on the OCDQ, the more innovative, intermediate special education departments will be.

One of the seven communication variable hypotheses was significant at the $p < .05$ level. Hypothesis 14 postulates a positive relationship between the average number of professional journals read plus professional organization memberships held by the staff, and the number of innovative special education programs practices and procedures adopted by intermediate special education departments in Michigan. Hypothesis 14 was supported. Therefore, the professional involvement of special education staff members appears to be related to innovativeness in intermediate departments of special education in Michigan. The direction of this relationship is that the greater the professional involvement of the special education staff, the more innovative the intermediate special education department.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

The rate of growth of special education programs for handicapped children has followed the slow adoption process pattern of innovations in general education. In Michigan 44 per cent of the handicapped children actually received service in special education programs in 1945. Yet in 1970, the per cent of handicapped children who received special education services had grown to only 65 per cent, an increase of 21 per cent in 25 years.

The concern of this study was to investigate the relationship between organizational climate variables, communication variables and the adoption of innovative special education programs, practices, and procedures. Knowledge of these relationships may help educators to hasten the growth of educational programs for handicapped children.

The population used in this study consisted of the 29 intermediate school districts in Michigan which employed a certified full-time director of special education and levied a tax ear-marked for special education programs.

The responses of 520 intermediate special education staff members were used in the analysis of data.

Two of the instruments used in this study were constructed by the author. The Intermediate School District Innovativeness Scale (ISDIS), provided an innovativeness score based upon the adoption within each intermediate school district of 19 programs, practices, and procedures which had been fully adopted by less than 50 per cent of the districts in the population.

The Communication Variables Questionnaire (CVQ) provided scores for the following seven communications variables:

1. Use of Mass Media sources of information.
2. Use of Interpersonal sources of information.
3. Opinion leadership of director.
4. Professional involvement of staff.
5. Professional involvement of director.
6. Staff cosmopolitaness.
7. Director cosmopolitaness.

In this study the Organizational Climate Description Questionnaire was revised to make the items appropriate for intermediate school district use. The revised OCDQ was factor analyzed and the revised factors were found to measure the same eight dimensions as the original OCDQ. These dimensions are called Disengagement, Hindrance, Esprit, Intimacy, Aloofness, Production, Emphasis, Thrust, and Consideration.

In addition to the three instruments above, the school-age population and the amount of money produced by the earmarked special education tax per child were obtained for each district from Michigan Department of Education records. These demographic variables were labeled population base, and financial base respectively.

The relationships between innovativeness and the organizational climate and demographic variables were analyzed through the use of Pearson Product Moment correlations. Esprit and Thrust from the OCDQ and the demographic variable of population base were found to be significantly correlated at the $p < .05$ level.

The relationships between innovativeness and the communication variables were measured by multiple linear regression analysis. Staff professional involvement accounted for 19.9 per cent of the variance in innovativeness and was the only communication variable to have a significant relationship with innovativeness at the $p < .05$ level.

Findings

Of the 17 relationships tested, only four variables were significantly related to innovativeness. This study found the following four relationships:

1. Innovativeness of intermediate special education departments was positively related to the school-age population of the intermediate school district.

Larger school-age population was associated with higher innovativeness.

2. Innovativeness of intermediate special education departments was positively related to the Esprit score on the revised OCDQ. Higher morale or Esprit was associated with higher innovativeness.
3. Innovativeness in intermediate special education departments was positively related to the Thrust score on the revised OCDQ. Higher Thrust was associated with higher innovativeness.
4. Innovativeness in intermediate special education departments was positively related to the professional involvement of the special education staff. Higher professional involvement was associated with higher innovativeness.

Conclusions

The conclusions that result from this study are based upon the questions raised in Chapter I.

Conclusion 1

Communication variables are related to the adoption of innovative special education programs, practices, and procedures in intermediate special education departments in Michigan.

Although only staff professional involvement of the communication variables contributed significantly to the

variance of innovativeness by itself, opinion leadership, director professional involvement, and director cosmopolitaness were also included in a linear regression equation which had a significance of .043 and accounted for 32.7 per cent of the variance of innovativeness.

Conclusion 2

Two organization climate variables, Esprit and Thrust, are related to the adoption of innovations in special education programs, practices, and procedures in intermediate special education departments in Michigan. Furthermore, higher Esprit, or morale of the special education staff, and higher director's Thrust, or the motivation of his staff through his personal example, are associated with more innovative intermediate special education departments.

Conclusion 3

The generalizations based on previous research in the diffusion of innovations do not apply to the adoption of innovative special education programs, practices, and procedures in intermediate special education departments in Michigan.

- a. The generalization that early adoptors have more favorable financial position does not generalize. The amount of intermediate special

education tax funds per child was not correlated with the adoption of innovative special education programs, practices, and procedures in intermediate special education departments in Michigan. (See discussion section for further comment.)

- b. The generalization that earlier adoptors are more cosmopolite than later adoptors is not supported. The number of days spent outside of the intermediate district to attend professional meetings by special education staffs and directors, i.e. cosmopoliteness was not significantly related to the adoption of innovations special education programs, practices, and procedures.
- c. The communication generalization that earlier adoptors have more opinion leadership than later adoptors is not supported. Opinion leadership was not significantly correlated with innovativeness in this study. Therefore, it appears that these three generalizations are not supported by this study.

Conclusion 4

Organizational Climate Description Questionnaire does generalize to special education departments in intermediate school districts in Michigan.

The factor analysis and factor matching procedures used in this study have shown that the factors which emerged from the intermediate school district revision of the OCDQ are statistically related to the original OCDQ developed with an elementary school population by Halpin and Croft (1962).

Discussion

Financial Base

Previous research has suggested that financial resources have a direct influence upon innovative behavior of school systems. Yet, this study did not show that the amount of Public Act 18 special education tax funds per pupil was related to the adoption of innovative special education programs, practices, and procedures. The lack of a relationship is probably due to the fact that some of the items defined as innovations required little or no extra expenditures of funds. These innovations were procedural items, such as cooperative inservice training programs with other intermediate school districts, comprehensive and integrated planning to meet the special education needs for the entire intermediate district area, and organized parent groups participating in program planning. Other innovations required the expenditures of considerable amounts of funds such as hiring consultants for learning disabilities, or operation of home

training programs for severely handicapped pre-school children. This wide range of cost of the programs, practices, and procedures used to determine the innovativeness score apparently gave each intermediate school district an equal chance to show that they were innovative. If nothing else, the finding of no relationship between financial status and innovativeness should encourage those special educators who feel that their districts are less than affluent to attempt to increase their services for handicapped children.

Population Base

Although financial base was not related to innovativeness, population base was related. The school-age population of the intermediate districts used in this study ranged from 8,206 to 264,760 with a mean population of 39,558. The Michigan Department of Education, Division of Special Education has recently recommended that the minimum school-age population for an intermediate school district should be 40,000. This school-age population would give the district enough children in the low incidence areas to be able to operate adequate programs. For example, at the incidence rate of one child per thousand (.001) there would be 40 deaf children of school-age. The State Department of Education in Michigan feels that this would allow for meaningful programs for all age levels within the intermediate district.

Some of the special education programs, practices, and procedures used to determine the innovativeness score were more likely to be found in larger districts because they dealt with low incidence handicapped areas such as severely handicapped pre-school children. Yet, many of the innovations used in this study did not require a large population base. In fact, 41 per cent of the intermediate districts studied indicated that they programmed for low incidence disability area children in cooperative programs with other intermediate districts.

The relationship shown between innovativeness and population base supports the Michigan Department of Education, Division of Special Education, contention that a minimum school-age population would facilitate the development of adequate and innovative special education programs, practices and procedures.

Opinion Leadership

The linear regression analysis involving communication variables showed that the combination of opinion leadership of the director and the professional involvement of the staff accounted for 30.68 per cent of the variance of innovativeness. This linear regression equation was significant at the .009 level. When opinion leadership was deleted from the equation, staff professional involvement accounted for 19.9 per cent of the

variance of innovativeness and was significant at the .015 level.

Since there is a loss of predictive power r^2 and significance when opinion leadership is dropped from the linear regression equation, there is a temptation to suggest that both opinion leadership and staff professional involvement be used to predict innovativeness. However, since the relationship between opinion leadership and innovativeness did not reach the .05 level of significance and the relationship shown was in a direction opposite of that indicated by previous research, it is recommended that opinion leadership should not be used as a factor in predicting innovativeness in intermediate special education departments in Michigan at this time.

Sources of Information

The two-step flow of information communication model discussed in Chapter II postulates that information enters a social system through one of its members who acts as an intermediary or gatekeeper. Appendix H shows that the pattern of use of information sources is similar for all staff positions. However, there is one notable exception to this pattern. Twenty-five per cent of all respondents indicated that they felt State Department of Education consultants were important sources of information about new ideas in special education. Yet,

69 per cent of the intermediate special education directors picked state consultants as important information sources. Directors also indicated a greater use of State Department of Education publications, (38 per cent) than the entire population, (18 per cent). These observations seem to indicate that the flow of information from the State Department of Education to intermediate special education staffs is channeled through the special education director. Therefore, the concept of the two-step flow of information model is supported.

Appendix H also indicates the relative importance of sources of information in the dissemination of new ideas about special education. The most used source was professional conventions and conferences, which was selected by 80 per cent of the respondents. Other intermediate staff members were chosen as an important source by 79 per cent of the respondents. This indicates that intermediate special education staff members feel that their peers are the second most important source of new ideas in special education. The least used information source was non-educator lay persons, (9 per cent) and publications of intermediate school districts and the state department of education, (18 per cent).

Appendix H could be used as a guide by those who desire to introduce a new idea into the intermediate special education system in Michigan. The most effective

mass media sources, professional conventions, and professional journals, should be used initially. If the intermediate director and at least one special education staff member was reached by the mass media sources, then word of mouth or interpersonal communication would help complete the diffusion of the new idea throughout the intermediate special education population.

Recommendations

Due to the slowness of the development of special education services for handicapped children, this study sought to increase the knowledge of educators regarding the relationship between certain variables and the adoption of innovative special education programs, practices, and procedures. The relationship shown by this study suggests some possible ways to aid the adoption process. According to the findings of this study, if the State Department of Education wanted to introduce a new special education program, practice, or procedure, and wanted to assure that the adoption process would have a maximum chance of success, it should chose an intermediate school district where the following conditions exist:

1. School-age population large enough to make the innovation practical.
2. A special education staff that reads many professional journals and belongs to many professional organizations i.e. is professionally involved.

3. A special education staff that has high morale
i.e. Esprit.
4. A director of special education who motivates his
staff by setting a personal example i.e. Thrust.

Implications for Further Study

Although this study suggests the conclusions discussed above, it has generated other topics which deserve study.

Opinion Leadership

The contradiction of the diffusion of innovations generalization that earlier adoptors have more opinion leadership than later adoptors, should be investigated. The measure of opinion leadership used in this study was based upon the interaction between the director and his own staff. Another method of measuring opinion leadership would be to have each of the directors indicate the names of other directors with whom he discusses new ideas in special education. This would give a measure of the opinion leadership of a director among his peers. The relationship between the adoption of innovative special education programs, practices, and procedures with the socio-metric measure of opinion leadership among intermediate special education directors should be investigated.

Financial Variables

In view of the relationship between innovativeness and financial variables found in previous research and the contradiction of this relationship by the present study, further investigation is indicated. The relationship between the adoption of innovative special education programs and other financial variables such as average staff salary, and directors' salary, should be investigated.

Intermediate School District

Thirty-two other states have some form of intermediate level of educational administration (Osborne, 1969). The results of this study should be compared with the results of similar investigations in other states. Replications of this study in other states should lead to a better understanding of the function of intermediate school districts and the generalizability of diffusion of innovation research and organizational climate research to intermediate districts throughout the United States.

Performance Variables

This study used concepts based upon the scores obtained by the administration of instruments. The organizational climate variables, communication variables and innovativeness were thus based upon the

perceptions and recall of the participants. On the other hand, the demographic variables used in this study were based upon facts taken from Michigan Department of Education records.

It is suggested that any further research which deals with the functions and problems of intermediate school districts in Michigan, or any other state, should include performance variables. The performance variables would be based upon the actual functioning of the intermediate district, such as the per cent of the school-age population being served by various types of special education programs, or the ratio of professional special education staff to the number of handicapped pupils served within the intermediate district. The addition of these performance variables to the demographic variables, and conceptual variables of innovativeness, organizational climate, and communication behavior should lead to a more comprehensive understanding of the function of special education departments in intermediate school districts.

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APPENDICES

APPENDIX A

ORGANIZATIONAL CLIMATE DESCRIPTION

QUESTIONNAIRE

APPENDIX A

ORGANIZATIONAL CLIMATE DESCRIPTION QUESTIONNAIRE

A. W. Halpin and D. B. Croft

The items in this questionnaire describe typical behaviors or conditions that occur within a school organization. Please indicate to what extent each of these descriptions characterizes your school. Please do not evaluate the items in terms of "good" or "bad" behavior, but read each item carefully and respond in terms of how well the statement describes your school.

The descriptive scale on which to rate the items is printed at the top of each page. Please read the Instructions which describe how you should mark your answers.

The purpose of this questionnaire is to secure a description of the different ways in which teachers behave and of the various conditions under which they must work. After you have answered the questionnaire we will examine the behaviors or conditions that have been described as typical by the majority of the teachers in your school, and we will construct from this description, a portrait of the Organizational Climate of your school.

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MARKING INSTRUCTIONS

Printed below is an example of a typical item found in the Organizational Climate Description Questionnaire:

1. Rarely occurs
2. Sometimes occurs
3. Often Occurs
4. Very frequently occurs

Teachers call each other by their first names

1 2 3 4

In this example the respondent marked alternative 3 to show that the inter-personal relationship described by this item "often occurs" at his school. Of course, any of the other alternatives could be selected, depending upon how often the behavior described by the item does, indeed, occur in your school.

Please mark your response clearly, as in the example. PLEASE BE SURE THAT YOU MARK EVERY ITEM.

BIOGRAPHICAL INFORMATION

Please place a check mark to the right of the appropriate category.

| | | |
|---------------------------------------|-------------|----------|
| 8. Position: | Principal | 1. _____ |
| | Teacher | 2. _____ |
| | Other | 3. _____ |
| 9. Sex: | Man | 1. _____ |
| | Woman | 2. _____ |
| 10. Age: | 20-29 | 1. _____ |
| | 30-39 | 2. _____ |
| | 40-49 | 3. _____ |
| | 50-59 | 4. _____ |
| | 60 and over | 5. _____ |
| 11. Years of experience in education: | 0-3 | 1. _____ |
| | 4-9 | 2. _____ |
| | 10-19 | 3. _____ |
| | 20-29 | 4. _____ |
| | 30 and over | 5. _____ |
| 12. Years at this school: | 0-3 | 1. _____ |
| | 4-9 | 2. _____ |
| | 10-19 | 3. _____ |
| | 20 or over | 4. _____ |

1. Rarely occurs
2. Sometimes occurs
3. Often occurs
4. Very frequently occurs

- | | |
|--|---------|
| 13. Teachers' closest friends are other faculty members at this school. | 1 2 3 4 |
| 14. The mannerisms of teachers at this school are annoying. | 1 2 3 4 |
| 15. Teachers spend time after school with students who have individual problems. | 1 2 3 4 |
| 16. Instructions for the operation of teaching aids are available. | 1 2 3 4 |
| 17. Teachers invite other faculty to visit them at home | 1 2 3 4 |
| 18. There is a minority group of teachers who always oppose the majority. | 1 2 3 4 |
| 19. Extra books are available for classroom use. | 1 2 3 4 |
| 20. Sufficient time is given to prepare administrative reports. | 1 2 3 4 |
| 21. Teachers know the family background of other faculty members. | 1 2 3 4 |
| 22. Teachers exert group pressure on non-conforming faculty members. | 1 2 3 4 |
| 23. In faculty meetings, there is a feeling of "let's get things done." | 1 2 3 4 |
| 24. Administrative paper work is burdensome at this school. | 1 2 3 4 |
| 25. Teachers talk about their personal life to other faculty members. | 1 2 3 4 |
| 26. Teachers seek special favors from the principal. | 1 2 3 4 |
| 27. School supplies are readily available for use in classwork. | 1 2 3 4 |
| 28. Student progress reports require too much work. | 1 2 3 4 |

1. Rarely occurs
2. Sometimes occurs
3. Often occurs
4. Very frequently occurs

- | | | | | | |
|-----|---|---|---|---|---|
| 29. | Teachers have fun socializing together during school time. | 1 | 2 | 3 | 4 |
| 30. | Teachers interrupt other faculty members who are talking in staff meetings. | 1 | 2 | 3 | 4 |
| 31. | Most of the teachers here accept the faults of their colleagues. | 1 | 2 | 3 | 4 |
| 32. | Teachers have too many committee requirements. | 1 | 2 | 3 | 4 |
| 33. | There is considerable laughter when teachers gather informally. | 1 | 2 | 3 | 4 |
| 34. | Teachers ask nonsensical questions in faculty meetings. | 1 | 2 | 3 | 4 |
| 35. | Custodial service is available when needed. | 1 | 2 | 3 | 4 |
| 36. | Routine duties interfere with the job of teaching. | 1 | 2 | 3 | 4 |
| 37. | Teachers prepare administrative reports by themselves. | 1 | 2 | 3 | 4 |
| 38. | Teachers ramble when they talk in faculty meetings. | 1 | 2 | 3 | 4 |
| 39. | Teachers at this school show much school spirit. | 1 | 2 | 3 | 4 |
| 40. | The principal goes out of his way to help teachers. | 1 | 2 | 3 | 4 |
| 41. | The principal helps teachers solve personal problems. | 1 | 2 | 3 | 4 |
| 42. | Teachers at this school stay by themselves. | 1 | 2 | 3 | 4 |
| 43. | The teachers accomplish their work with great vim, vigor and pleasure. | 1 | 2 | 3 | 4 |
| 44. | The principal sets an example by working hard himself. | 1 | 2 | 3 | 4 |

1. Rarely occurs
2. Sometimes occurs
3. Often occurs
4. Very frequently occurs

- | | |
|--|---------|
| 45. The principal does personal favors for teachers. | 1 2 3 4 |
| 46. Teachers eat lunch by themselves in their own classrooms | 1 2 3 4 |
| 47. The morale of the teachers is high. | 1 2 3 4 |
| 48. The principal uses constructive criticism. | 1 2 3 4 |
| 49. The principal stays after school to help teachers finish their work. | 1 2 3 4 |
| 50. Teachers socialize together in small select groups. | 1 2 3 4 |
| 51. The principal makes all class-scheduling decisions. | 1 2 3 4 |
| 52. Teachers are contacted by the principal each day. | 1 2 3 4 |
| 53. The principal is well prepared when he speaks at school functions. | 1 2 3 4 |
| 54. The principal helps staff members settle minor differences | 1 2 3 4 |
| 55. The principal schedules the work for the teachers. | 1 2 3 4 |
| 56. Teachers leave the grounds during the school day. | 1 2 3 4 |
| 57. The principal criticizes a specific act rather than a staff member. | 1 2 3 4 |
| 58. Teachers help select which courses will be taught. | 1 2 3 4 |
| 59. The principal corrects teachers' mistakes. | 1 2 3 4 |
| 60. The principal talks a great deal. | 1 2 3 4 |

1. Rarely occurs
2. Sometimes occurs
3. Often occurs
4. Very frequently occurs

- | | | | | | |
|-----|--|---|---|---|---|
| 61. | The principal explains his reasons for criticism to teachers. | 1 | 2 | 3 | 4 |
| 62. | The principal tries to get better salaries for teachers. | 1 | 2 | 3 | 4 |
| 63. | Extra duty for teachers is posted conspicuously. | 1 | 2 | 3 | 4 |
| 64. | The rules set by the principal are never questioned. | 1 | 2 | 3 | 4 |
| 65. | The principal looks out for the personal welfare of teachers. | 1 | 2 | 3 | 4 |
| 66. | School secretarial service is available for teachers use. | 1 | 2 | 3 | 4 |
| 67. | The principal runs the faculty meeting like a business conference. | 1 | 2 | 3 | 4 |
| 68. | The principal is in the building before teachers arrive. | 1 | 2 | 3 | 4 |
| 69. | Teachers work together preparing administrative reports. | 1 | 2 | 3 | 4 |
| 70. | Faculty meetings are organized according to a tight agenda. | 1 | 2 | 3 | 4 |
| 71. | Faculty meetings are mainly principal-report meetings. | 1 | 2 | 3 | 4 |
| 72. | The principal tells teachers of new ideas he has run across. | 1 | 2 | 3 | 4 |
| 73. | Teachers talk about leaving the school system. | 1 | 2 | 3 | 4 |
| 74. | The principal checks the subject-matter ability of teachers. | 1 | 2 | 3 | 4 |
| 75. | The principal is easy to understand. | 1 | 2 | 3 | 4 |

1. Rarely occurs
2. Sometimes occurs
3. Often occurs
4. Very frequently occurs

- | | | |
|-----|--|---------|
| 76. | Teachers are informed of the results of a supervisor's visit. | 1 2 3 4 |
| 77. | Grading practices are standardized at this school. | 1 2 3 4 |
| 78. | The principal insures that teachers work to their full capacity. | 1 2 3 4 |
| 79. | Teachers leave the building as soon as possible at day's end. | 1 2 3 4 |
| 80. | The principal clarifies wrong ideas a teacher may have. | 1 2 3 4 |

APPENDIX B

INTERMEDIATE SCHOOL DISTRICT SPECIAL EDUCATION
QUESTIONNAIRE

INTERMEDIATE SCHOOL DISTRICT SPECIAL EDUCATION QUESTIONNAIRE

General Instructions

This questionnaire is designed to measure the organizational behavior, communication behavior, as well as to gather general biographical data concerning intermediate departments of special education.

Your responses to items on this questionnaire will be held in the strictest confidence. To protect the anonymity of each respondent and to insure a meaningful response, please observe the following procedures:

1. Use a Number 2 or soft lead pencil to mark the answer sheet.
2. Mark each response carefully.
3. Completely erase all errors.
4. Do not discuss items with other staff members while answering the questionnaire.
5. Place your answer sheet in the 8½ x 11 manila envelope provided.
6. Turn in this questionnaire.

Specific Instructions

On the upper left hand side of the answer sheet is a box marked "Position." Please indicate your position by marking the appropriate space according to the following code:

- | | |
|-------------------------|--------------------------------|
| 1. Director | 6. Type C Consultant |
| 2. Supervisor | 7. Teacher Consultant (Type 4) |
| 3. Diagnostician | 8. Teacher of Homebound |
| 4. School Social Worker | and/or Hospitalized |
| 5. Speech Correctionist | 9. Other |

Each section of this questionnaire will be preceded by its own specific instructions.

ORGANIZATIONAL CLIMATE DESCRIPTION QUESTIONNAIRE

A. W. Halpin and D. B. Croft

The items in this questionnaire describe typical behaviors or conditions that occur within an organization. Please indicate to what extent each of these descriptions characterizes your special education department staff in the intermediate office. Please do not evaluate the items in terms of "good" or "bad" behavior, but read each item carefully and respond in terms of how well the statement describes your staff.

The descriptive scale on which to rate the items is printed at the top of each page. Please read the instructions which describe how you should mark your answers.

The purpose of this questionnaire is to secure a description of the different ways in which members of the staff behave and of the various conditions under which they must work. This questionnaire also asks each respondent to indicate what behavior he desires for the staff and director of intermediate special education departments. After you have answered the questionnaire, we will examine the behaviors or conditions that have been described as typical by the majority of the staff members, and we will construct from this description, a portrait of the Organizational Climate of your staff.

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MARKING INSTRUCTIONS

Printed below is an example of a typical item found in the Organizational Climate Description Questionnaire:

| <u>REAL</u> | | <u>DESIRED</u> | |
|---------------------------|--|---------------------------------|--|
| 1. Rarely occurs | | 1. Should rarely occur | |
| 2. Sometimes occurs | | 2. Should sometimes occur | |
| 3. Often occurs | | 3. Should often occur | |
| 4. Very frequently occurs | | 4. Should very frequently occur | |

Sample item:

| | <u>REAL</u> | | | | <u>DESIRED</u> | | | |
|---|-------------|-----|------------|-----|----------------|------------|-----|-----|
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Staff members call each other by their first names. | --- | --- | --- | --- | --- | --- | --- | --- |

In this example, the respondent marked alternative 3 under the REAL column on the Answer Sheet to show that the interpersonal relationship described by this item does in fact "often occur" among his colleagues.

The respondent also marked alternative 2 under the DESIRED column to indicate that he desires that this behavior "should sometimes occur."

Please mark your responses clearly, making sure that you mark every item in BOTH COLUMNS. If changes are necessary, completely erase the response you wish to change.

DO NOT CONTINUE UNTIL SPECIFIC INSTRUCTIONS ARE GIVEN.

REAL

1. Rarely occurs
2. Sometimes occurs
3. Often occurs
4. Very frequently occurs

DESIRED

1. Should rarely occur
2. Should sometimes occur
3. Should often occur
4. Should very frequently occur

1. Staff members' closest friends are other members of this staff.
2. The mannerisms of members of this staff are annoying.
3. Staff members spend time after hours with teachers who have individual problems.
4. Instructions for operation of educational media are available.
5. Staff members invite other members to visit them at home.
6. There is a minority group of staff members who opposes the majority.
7. Extra materials are available for staff use.
8. Sufficient time is given to prepare administrative reports.
9. Staff members know the family background of other staff members.
10. Staff members exert group pressure on nonconforming staff members.
11. In staff meetings, there is a feeling of "let's get things done."
12. Administrative paper work is burdensome in the intermediate office.
13. Staff members talk about their personal life to other staff members.
14. Staff members seek special favors from the director.
15. Office supplies are readily available for use of individual staff members.
16. Student contact reports require too much work.
17. Staff members have fun socializing together during work hours.

PLEASE CONTINUE

REAL

1. Rarely occurs
2. Sometimes occurs
3. Often occurs
4. Very frequently occurs

DESIRED

1. Should rarely occur
2. Should sometimes occur
3. Should often occur
4. Should very frequently occur

18. Staff members interrupt other members who are talking in staff meetings.
19. Most of the staff accept the faults of their colleagues.
20. Staff members have too many committee requirements.
21. There is considerable laughter when the staff gathers informally.
22. Members ask nonsensical questions in staff meetings.
23. Custodial service is available when needed.
24. Routine duties interfere with individual job requirements.
25. Staff members prepare administrative reports by themselves.
26. Members ramble when they talk in staff meetings.
27. Members of this staff show loyalty to the intermediate district.
28. The director goes out of his way to help staff members.
29. The director helps staff members solve personal problems.
30. Members of this staff stay by themselves.
31. Staff members accomplish their work with great vim, vigor, and pleasure.
32. The director sets an example by working hard himself.
33. The director does personal favors for members of the staff.
34. Staff members eat lunch by themselves.
35. The morale of the staff is high.
36. The director uses constructive criticism.
37. The director stays after hours to help staff members finish their work.

PLEASE CONTINUE

REAL

1. Rarely occurs
2. Sometimes occurs
3. Often occurs
4. Very frequently occurs

DESIRED

1. Should rarely occur
2. Should sometimes occur
3. Should often occur
4. Should very frequently occur

38. Staff members socialize together in small select groups.
39. The director makes all travel scheduling decisions.
40. Staff members are contacted by the director each day.
41. The director is well prepared when he speaks at intermediate district functions.
42. The director helps staff members settle minor differences.
43. The director schedules the work for the staff.
44. Staff members may deviate from their work schedule at their own discretion.
45. Staff members help select areas of discussion for staff meetings.
46. The director corrects staff members' mistakes.
47. The director talks a great deal.
48. The director explains his reasons for criticism to staff members.
49. The director tries to get better salaries for staff members.
50. Extra duty for staff members is posted conspicuously.
51. The rules set by the director are never questioned.
52. The director looks out for the personal welfare of his staff.
53. Secretarial service is available for staff members' use.
54. The director runs the staff meetings like a business conference.
55. The director is in the office before staff members arrive.

PLEASE CONTINUE

REAL

1. Rarely occurs
2. Sometimes occurs
3. Often occurs
4. Very frequently occurs

DESIRED

1. Should rarely occur
2. Should sometimes occur
3. Should often occur
4. Should very frequently occur

56. Staff members work together preparing administrative reports.
57. Staff meetings are organized according to a tight agenda.
58. Staff meetings are mainly director-report meetings.
59. The director tells staff members of new ideas he has run across.
60. Staff members talk about leaving the intermediate district.
61. The director checks the competence of staff members.
62. The director is easy to understand.
63. Staff members are informed of the results of a supervisor's visit.
64. The director insures that staff members work to their full capacity.

Items 65 through 71 are intended to gather Biographical information. Please mark the appropriate response on your Answer Sheet for each item.

- | | |
|-------------------------|---------------|
| 65. Age | 1. 20-29 |
| | 2. 30-39 |
| | 3. 40-49 |
| | 4. 50-59 |
| | 5. 60 or over |
| 66. Sex | 1. Male |
| | 2. Female |
| 67. Years on this staff | 1. 0-3 |
| | 2. 4-9 |
| | 3. 10-19 |
| | 4. 20 or over |

PLEASE CONTINUE

- | | |
|---|--|
| 68. Years of experience in education | 1. 0-3 2. 4-9 3. 10-19 4. 20-29 5. 30 or over |
| 69. Experience in special education | 1. 0-1 years 2. 2-3 years 3. 4-5 years 4. 6-7 years 5. 8 years or more |
| 70. Highest degree held | 1. Associate 2. Bachelors 3. Masters 4. Specialist 5. Doctorate |
| 71. Year of highest degree | 1. 1968-1969 2. 1966-1967 3. 1964-1965 4. 1962-1963 5. 1961 or before |

PLEASE CONTINUE QUESTIONNAIRE ON THE NEXT PAGE.

Items 72 through 85 were designed to measure the communications behavior of Intermediate Special Education Departments. Please mark the appropriate response on your answer sheet for each item.

Items 72-81

Please indicate your most important source(s) of information about new ideas in Special Education. Place a mark under Number 1 after the source(s) that you feel are most important.

- 72. Intermediate Director of Special Education.
- 73. Intermediate Special Education staff.
- 74. Local Special Education personnel.
- 75. Non-educator lay persons.
- 76. State Department of Education consultants.
- 77. Conventions of professional organizations.
- 78. Publications i.e. Journals of Professional Organizations.
- 79. Intermediate school district publication e.g. Newsletter.
- 80. State Department of Education publications.
- 81. The mass media i.e. radio, television, newspapers.

Items 82-86

Please write your response (a number) on the line after the appropriate number on the answer sheet.

- 82. In how many professional organizations are you a dues paying member?
- 83. How many professional journals do you read regularly?
- 84. How many days during the 1968-69 school year did you spend away from the intermediate district attending professional conferences, conventions, committee meetings, or organization meetings?
- 85. On the lines provided, please write the Position (Social worker, Director, etc.) of three persons on the intermediate staff with whom you discuss new ideas for special education programs, practices, or procedures.
- 86. On the average, how many hours do you spend in the intermediate office each week.

THANK YOU FOR YOUR COOPERATION IN THIS STUDY

APPENDIX C

SUPPLEMENTARY INSTRUCTIONS

SUPPLEMENTARY INSTRUCTIONS

After reading pages 1, 2, and 3 of the questionnaire:

1. Please note that for each item, you will first respond to how you presently perceive the situation to be and then how you would desire it to be. Notice also that the answer sheet is numbered across the entire line for numbers 1 and 2; 3 and 4 on the second line, etc.
2. When statements do not directly apply to an experience you have had, please answer the question on the basis of how you believe such an experience would have resulted had it occurred--and how you would have desired it to be.
3. Questions which relate to "supervisor" behavior should be answered with respect to the supervision regardless of whether it is the director, supervisor, or chairman of a department.
4. You will notice on the answer sheet for items 72 through 81 that only space number 1 is numbered. Of items 72-81, please fill the first space only for those items which you feel are the most important source(s) of information about new ideas in special education.
5. Items 82, 83, 84, and 86 require a number to be written on the red line to the right of the item number. If a "0" is appropriate, please place a "0" on the line rather than leaving it blank.
6. For item 85 you are asked to write the positions of three people on your staff with whom you most often discuss new ideas, practices, or procedures for special education. For example, if you discuss new ideas most often with two speech therapists and a consultant, your response might be: line 1 - speech therapist; line 2 - speech therapist; line 3 - consultant.
7. When you have finished, please check your answer sheet to make sure you have responded to all items. An envelope is being provided for returning the questionnaire and answer sheets.

APPENDIX D

ROTATED ITEM FACTOR MATRIX FOR 64 ITEMS OF
THE REVISED OCDQ (N = 520)

ROTATED ITEM FACTOR MATRIX FOR 64 ITEMS OF THE REVISED OCDQ (N = 520)

| | I | II | III | IV | V | VI | VII | VIII | h^2 |
|----|-----|-----|-----|-----|-----|-----|-----|------|-------|
| 1 | 07* | 08 | -44 | 06 | 05 | -00 | 10 | 06 | 22 |
| 2 | -01 | 38 | 03 | -07 | 23 | 21 | 13 | 16 | 29 |
| 3 | 01 | 07 | -18 | -04 | -05 | -06 | 07 | 60 | 40 |
| 4 | 21 | 04 | -14 | 13 | -20 | 16 | 33 | -17 | 29 |
| 5 | 07 | 04 | -59 | 16 | 01 | -05 | 22 | 14 | 45 |
| 6 | -15 | 36 | -03 | -03 | -10 | 36 | -12 | 17 | 34 |
| 7 | 24 | 03 | -17 | 11 | -27 | -00 | 37 | -06 | 31 |
| 8 | 19 | 07 | 05 | 06 | -58 | 02 | 05 | -00 | 38 |
| 9 | 01 | -08 | -67 | 08 | -04 | -01 | -10 | -03 | 47 |
| 10 | -05 | 42 | -14 | 19 | -03 | 27 | -07 | 04 | 31 |
| 11 | 34 | -16 | -08 | 18 | -06 | -00 | 38 | 09 | 33 |
| 12 | -04 | 11 | 01 | 15 | 50 | 18 | 05 | -03 | 33 |
| 13 | 04 | 11 | -63 | -03 | -03 | 20 | -05 | -01 | 46 |
| 14 | -15 | 31 | -18 | 05 | 19 | 27 | -17 | -20 | 33 |
| 15 | 09 | -01 | -07 | 03 | -46 | 02 | 35 | -15 | 37 |
| 16 | 05 | 16 | -09 | 02 | 49 | 00 | -01 | -14 | 29 |
| 17 | 02 | 21 | -51 | -08 | -10 | -01 | -00 | -04 | 32 |
| 18 | 02 | 53 | -00 | 05 | 13 | -07 | -07 | -12 | 33 |
| 19 | 28 | -27 | -20 | -12 | -10 | -05 | 13 | -19 | 27 |
| 20 | -08 | 14 | 11 | 14 | 49 | 10 | 03 | 24 | 36 |
| 21 | 20 | -04 | -48 | -09 | 08 | 08 | 11 | 04 | 30 |
| 22 | 08 | 58 | -07 | -03 | 20 | 05 | 12 | -19 | 43 |
| 23 | 15 | -05 | -13 | -04 | -38 | 32 | 12 | 02 | 30 |
| 24 | -03 | 20 | -04 | 01 | 61 | 21 | -03 | -14 | 47 |
| 25 | -07 | 13 | -05 | -19 | -04 | 23 | 24 | 05 | 18 |
| 26 | -14 | 50 | 01 | -13 | 14 | -09 | 01 | 10 | 33 |
| 27 | 31 | -17 | -22 | 09 | 06 | 07 | 49 | 22 | 48 |
| 28 | 77 | -02 | -09 | -00 | -10 | 08 | 03 | -02 | 62 |
| 29 | 51 | -02 | -33 | -05 | 12 | -02 | -19 | -02 | 44 |
| 30 | -08 | 25 | 37 | -11 | 10 | 02 | -18 | 06 | 26 |
| 31 | 24 | -21 | -16 | 02 | 01 | -11 | 30 | 52 | 50 |
| 32 | 63 | -11 | -04 | -02 | -10 | -12 | 09 | 22 | 50 |
| 33 | 38 | 15 | -27 | 08 | 03 | 05 | -29 | 18 | 40 |
| 34 | 10 | 19 | 21 | -11 | 02 | -01 | -07 | 39 | 25 |
| 35 | 44 | -15 | -21 | -02 | -04 | -05 | 52 | 15 | 55 |
| 36 | 61 | 02 | 04 | -11 | 15 | -03 | 29 | 13 | 51 |
| 37 | 49 | 14 | -05 | 09 | 04 | -02 | -06 | 35 | 40 |
| 38 | 00 | 19 | -11 | -01 | 14 | 44 | -06 | -04 | 26 |
| 39 | -04 | -08 | 02 | 33 | 11 | 08 | -01 | 13 | 15 |
| 40 | 09 | 02 | -02 | 58 | -03 | -08 | -03 | -02 | 36 |
| 41 | 62 | -09 | 08 | -04 | -16 | 13 | 11 | -01 | 45 |
| 42 | 44 | 03 | -11 | 34 | 03 | -16 | -02 | -14 | 37 |
| 43 | -03 | -03 | -02 | 60 | -01 | 08 | -01 | -09 | 37 |
| 44 | 10 | 33 | -11 | -23 | -08 | -08 | 01 | 04 | 20 |
| 45 | 20 | 03 | -13 | 35 | -04 | -28 | 28 | -03 | 34 |
| 46 | 16 | 18 | 10 | 46 | 01 | 00 | 13 | -02 | 37 |
| 47 | -32 | 23 | -09 | 22 | 09 | 18 | -11 | 09 | 27 |
| 48 | 49 | 15 | -05 | 06 | -09 | -06 | 33 | -14 | 41 |
| 49 | 36 | 02 | -18 | 18 | 05 | -13 | 21 | 03 | 26 |
| 50 | 08 | 08 | 05 | 10 | -07 | 23 | 09 | -10 | 10 |
| 51 | -01 | 04 | -04 | 22 | 07 | 15 | -24 | 14 | 16 |
| 52 | 63 | -04 | -18 | 07 | 06 | -01 | 02 | -03 | 44 |
| 53 | 14 | 11 | -04 | 10 | -32 | 09 | 44 | -04 | 35 |
| 54 | 09 | -08 | 11 | 19 | 08 | 43 | 33 | 04 | 36 |
| 55 | 28 | -02 | 05 | 05 | -04 | 29 | 01 | 08 | 18 |
| 56 | 17 | -09 | -24 | 28 | -01 | 09 | -03 | 21 | 23 |
| 57 | 13 | -26 | 01 | 20 | 26 | 53 | 01 | 01 | 47 |
| 58 | -12 | -05 | -12 | -04 | 14 | 45 | -11 | -10 | 28 |
| 59 | 51 | 02 | -10 | 20 | -10 | -14 | 13 | 11 | 37 |
| 60 | -12 | 15 | -00 | 05 | -10 | 11 | -57 | -11 | 40 |
| 61 | 30 | -10 | -02 | 47 | 06 | 13 | 17 | 01 | 37 |
| 62 | 64 | -04 | 02 | -02 | -14 | 05 | 22 | -03 | 48 |
| 63 | 36 | -06 | -12 | 31 | -15 | 05 | 22 | -16 | 34 |
| 64 | 44 | -07 | 04 | 37 | -03 | 12 | 21 | 15 | 42 |

* The decimal points have been omitted.

APPENDIX E

INTER CORRELATION MATRIX FOR 64 ITEMS
OF INTERMEDIATE REVISION OF O.C.D.Q.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | | |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----|------|------|----|------|------|----|----|------|------|----|
| 1 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 008 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 08 | 09 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 09 | 03 | 01 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 31 | 00 | 14 | | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 10 | 17 | 09 | 03 | | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 11 | 08 | 06 | 14 | 16 | | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 02 | 07 | 04 | 12 | 04 | 01 | | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 20 | 04 | 10 | 05 | 31 | 01 | 10 | | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 06 | 16 | 08 | 06 | 07 | 23 | 01 | 30 | | 1.00 | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | 09 | 10 | 06 | 20 | 15 | 12 | 21 | 15 | 16 | | 1.00 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 00 | 15 | 01 | 02 | 01 | 01 | 16 | 18 | 02 | 08 | | 1.00 | | | | | | | | | | | | | | | | | | | | | |
| 13 | 20 | 05 | 09 | 07 | 30 | 07 | 07 | 01 | 13 | 18 | 31 | | 1.00 | | | | | | | | | | | | | | | | | | | | |
| 14 | 12 | 17 | 10 | 05 | 01 | 25 | 08 | 10 | 18 | 20 | 17 | 16 | | 1.00 | | | | | | | | | | | | | | | | | | | |
| 15 | 01 | 17 | 01 | 27 | 05 | 06 | 33 | 24 | 31 | 01 | 07 | 20 | 08 | | 1.00 | | | | | | | | | | | | | | | | | | |
| 16 | 01 | 09 | 01 | 02 | 06 | 04 | 02 | 21 | 03 | 10 | 06 | 26 | 34 | 11 | | 1.00 | | | | | | | | | | | | | | | | | |
| 17 | 11 | 01 | 03 | 06 | 19 | 07 | 00 | 18 | 08 | 02 | 03 | 25 | 04 | 05 | 32 | | 1.00 | | | | | | | | | | | | | | | | |
| 18 | 01 | 18 | 05 | 04 | 00 | 12 | 05 | 03 | 03 | 17 | 03 | 12 | 06 | 11 | 06 | 10 | 11 | 1.00 | | | | | | | | | | | | | | | |
| 19 | 02 | 14 | 04 | 10 | 07 | 15 | 16 | 11 | 11 | 14 | 17 | 05 | 03 | 10 | 20 | 06 | 09 | 11 | 1.00 | | | | | | | | | | | | | | |
| 20 | 06 | 10 | 07 | 08 | 00 | 11 | 07 | 20 | 10 | 05 | 33 | 25 | 03 | 13 | 13 | 16 | 09 | 13 | 15 | 1.00 | | | | | | | | | | | | | |
| 21 | 10 | 04 | 12 | 11 | 23 | 03 | 12 | 05 | 18 | 01 | 12 | 07 | 09 | 01 | 27 | 39 | 21 | 05 | 11 | 1.00 | | | | | | | | | | | | | |
| 22 | 06 | 23 | 04 | 01 | 07 | 08 | 01 | 04 | 02 | 16 | 03 | 37 | 10 | 20 | 05 | 11 | 08 | 23 | 04 | 11 | 1.00 | | | | | | | | | | | | |
| 23 | 07 | 06 | 04 | 18 | 13 | 01 | 11 | 15 | 01 | 01 | 08 | 07 | 39 | 04 | 18 | 12 | 12 | 07 | 14 | 14 | 1.00 | | | | | | | | | | | | |
| 24 | 01 | 23 | 07 | 02 | 06 | 11 | 13 | 25 | 04 | 11 | 07 | 29 | 06 | 26 | 21 | 27 | 03 | 15 | 13 | 27 | 07 | 22 | 12 | 1.00 | | | | | | | | | |
| 25 | 02 | 01 | 07 | 06 | 01 | 07 | 05 | 02 | 02 | 03 | 02 | 06 | 10 | 01 | 10 | 00 | 05 | 02 | 08 | 01 | 06 | 08 | 01 | 01 | 1.00 | | | | | | | | |
| 26 | 01 | 14 | 08 | 02 | 01 | 07 | 05 | 06 | 06 | 06 | 06 | 19 | 05 | 04 | 12 | 05 | 06 | 08 | 22 | 11 | 13 | 07 | 25 | 09 | 20 | 04 | 1.00 | | | | | | |
| 27 | 15 | 13 | 08 | 19 | 24 | 16 | 25 | 06 | 08 | 03 | 31 | 04 | 09 | 12 | 10 | 06 | 08 | 07 | 13 | 30 | 22 | 03 | 18 | 04 | 06 | 12 | 1.00 | | | | | | |
| 28 | 07 | 02 | 02 | 23 | 14 | 09 | 26 | 17 | 04 | 10 | 24 | 06 | 09 | 12 | 17 | 05 | 03 | 31 | 20 | 09 | 21 | 07 | 16 | 10 | 00 | 13 | 1.00 | | | | | | |
| 29 | 17 | 01 | 07 | 19 | 14 | 07 | 14 | 07 | 19 | 10 | 16 | 02 | 19 | 06 | 04 | 02 | 11 | 19 | 01 | 18 | 07 | 14 | 00 | 03 | 07 | 19 | 1.00 | | | | | | |
| 30 | 10 | 09 | 02 | 07 | 20 | 09 | 11 | 07 | 19 | 08 | 10 | 06 | 08 | 14 | 14 | 01 | 14 | 10 | 13 | 12 | 18 | 01 | 04 | 04 | 03 | 10 | 13 | 1.00 | | | | | |
| 31 | 04 | 18 | 12 | 25 | 11 | 09 | 21 | 16 | 07 | 11 | 08 | 15 | 30 | 11 | 32 | 15 | 16 | 06 | 09 | 05 | 20 | 10 | 13 | 14 | 04 | 07 | 33 | 18 | 07 | 18 | 1.00 | | |
| 32 | 03 | 17 | 12 | 25 | 11 | 09 | 21 | 16 | 07 | 11 | 08 | 15 | 30 | 11 | 32 | 15 | 16 | 06 | 09 | 05 | 20 | 10 | 13 | 14 | 04 | 07 | 33 | 18 | 07 | 18 | 1.00 | | |
| 33 | 11 | 03 | 05 | 07 | 09 | 12 | 06 | 09 | 16 | 10 | 05 | 05 | 16 | 12 | 02 | 14 | 15 | 02 | 03 | 05 | 15 | 11 | 05 | 12 | 01 | 07 | 15 | 24 | 41 | 01 | 11 | 1.00 | |
| 34 | 02 | 03 | 08 | 10 | 09 | 00 | 04 | 07 | 05 | 01 | 03 | 10 | 04 | 07 | 02 | 02 | 05 | 09 | 07 | 07 | 10 | 05 | 00 | 01 | 02 | 08 | 05 | 03 | 05 | 11 | 07 | 08 | |
| 35 | 16 | 12 | 08 | 20 | 20 | 18 | 27 | 15 | 12 | 03 | 35 | 10 | 10 | 16 | 19 | 08 | 11 | 04 | 22 | 06 | 24 | 04 | 13 | 14 | 02 | 15 | 50 | 39 | 18 | 19 | 41 | 30 | |
| 36 | 08 | 04 | 13 | 22 | 16 | 10 | 26 | 13 | 01 | 02 | 28 | 05 | 02 | 17 | 11 | 01 | 31 | 05 | 16 | 02 | 12 | 03 | 13 | 11 | 03 | 12 | 31 | 44 | 23 | 08 | 29 | 41 | |
| 37 | 11 | 02 | 14 | 09 | 17 | 02 | 12 | 09 | 04 | 04 | 17 | 05 | 02 | 12 | 03 | 04 | 03 | 04 | 01 | 02 | 14 | 07 | 09 | 02 | 02 | 00 | 17 | 34 | 26 | 02 | 17 | 29 | |
| 38 | 09 | 15 | 09 | 04 | 09 | 17 | 01 | 08 | 01 | 16 | 08 | 13 | 16 | 20 | 08 | 09 | 09 | 04 | 13 | 14 | 05 | 12 | 07 | 16 | 04 | 05 | 01 | 00 | 06 | 09 | 11 | 01 | |
| 39 | 05 | 05 | 01 | 03 | 15 | 00 | 02 | 01 | 02 | 06 | 00 | 05 | 01 | 10 | 06 | 06 | 05 | 01 | 03 | 02 | 01 | 06 | 02 | 01 | 04 | 02 | 01 | 04 | 00 | 06 | 03 | 01 | |
| 40 | 04 | 02 | 08 | 04 | 13 | 03 | 08 | 00 | 05 | 01 | 10 | 06 | 06 | 06 | 06 | 05 | 01 | 03 | 02 | 01 | 06 | 02 | 01 | 04 | 02 | 02 | 01 | 04 | 00 | 06 | 03 | 01 | |
| 41 | 05 | 05 | 01 | 20 | 03 | 05 | 18 | 14 | 02 | 03 | 27 | 14 | 08 | 13 | 12 | 02 | 09 | 00 | 08 | 14 | 05 | 11 | 03 | 16 | 10 | 03 | 17 | 21 | 43 | 24 | 03 | 18 | |
| 42 | 17 | 04 | 04 | 14 | 09 | 11 | 13 | 08 | 08 | 02 | 17 | 05 | 09 | 03 | 07 | 03 | 02 | 08 | 14 | 05 | 11 | 03 | 16 | 10 | 03 | 17 | 21 | 43 | 24 | 03 | 18 | 43 | |
| 43 | 02 | 06 | 07 | 11 | 07 | 03 | 01 | 02 | 04 | 11 | 07 | 11 | 04 | 07 | 04 | 01 | 02 | 01 | 08 | 04 | 01 | 01 | 01 | 03 | 07 | 07 | 05 | 06 | 02 | 06 | 08 | 01 | 07 |
| 44 | 02 | 01 | 01 | 06 | 03 | 07 | 01 | 04 | 04 | 06 | 01 | 01 | 08 | 07 | 04 | 01 | 02 | 01 | 08 | 04 | 01 | 01 | 01 | 03 | 07 | 07 | 05 | 06 | 02 | 06 | 08 | 01 | 07 |
| 45 | 04 | 16 | 01 | 14 | 16 | 08 | 20 | 11 | 07 | 01 | 30 | 01 | 00 | 00 | 02 | 05 | 12 | 05 | 09 | 04 | 02 | 13 | 04 | 02 | 11 | 05 | 08 | 00 | 06 | 03 | 03 | 03 | |
| 46 | 01 | 00 | 04 | 10 | 05 | 04 | 08 | 03 | 03 | 07 | 06 | 11 | 07 | 02 | 05 | 01 | 01 | 08 | 07 | 07 | 03 | 09 | 01 | 01 | 02 | 11 | 15 | 28 | 23 | 08 | 04 | 21 | |
| 47 | 04 | 12 | 03 | 08 | 14 | 08 | 11 | 02 | 15 | 10 | 13 | 08 | 13 | 18 | 07 | 09 | 10 | 18 | 08 | 05 | 10 | 10 | 06 | 09 | 06 | 06 | 12 | 22 | 06 | 16 | 12 | 19 | |
| 48 | 08 | 06 | 04 | 17 | 13 | 08 | 15 | 13 | 05 | 04 | 25 | 02 | 09 | 08 | 16 | 01 | 10 | 05 | 13 | 13 | 11 | 10 | 12 | 04 | 04 | 04 | 18 | 32 | 14 | 07 | 16 | 35 | |
| 49 | 15 | 05 | 01 | 17 | 17 | 13 | 19 | 10 | 05 | 04 | 20 | 05 | 06 | 06 | 12 | 03 | 08 | 01 | 09 | 01 | 09 | 01 | 06 | 01 | 01 | 05 | 25 | 25 | 23 | 11 | 20 | 22 | |
| 50 | 03 | 01 | 03 | 02 | 07 | 07 | 01 | 09 | 02 | 09 | 06 | 07 | 00 | 04 | 07 | 03 | 03 | 01 | 02 | 01 | 01 | 05 | 03 | 01 | 07 | 03 | 01 | 02 | 06 | 05 | 00 | 04 | |
| 51 | 07 | 04 | 02 | 05 | 05 | 05 | 08 | 02 | 05 | 08 | 04 | 37 | 12 | 03 | 03 | 04 | 12 | 09 | 06 | 07 | 00 | 06 | 09 | 05 | 00 | 03 | 00 | 08 | 05 | 03 | 02 | 02 | |
| 52 | 12 | 04 | 04 | 13 | 16 | 03 | 21 | 13 | 09 | 04 | 24 | 01 | 16 | 12 | 07 | 05 | 04 | 07 | 05 | 16 | 05 | 18 | 04 | 08 | 02 | 00 | 11 | 26 | 50 | 32 | 09 | 18 | 33 |
| 53 | 11 | 10 | 02 | 20 | 10 | 05 | 24 | 20 | 04 | 02 | 14 | 09 | 07 | 07 | 26 | 09 | 04 | 08 | 04 | 10 | 04 | 03 | 20 | 11 | 07 | 06 | 29 | 18 | 11 | 07 | 09 | 14 | |
| 54 | 01 | 05 | 04 | 11 | 06 | 05 | 05 | 06 | 01 | 04 | 21 | 05 | 00 | 06 | 02 | 02 | 10 | 07 | 07 | 08 | 03 | 07 | 06 | 06 | 09 | 05 | 12 | 09 | 07 | 07 | 10 | 06 | |
| 55 | 02 | 04 | 04 | 01 | 06 | 01 | 05 | 06 | 03 | 09 | 12 | 02 | 01 | 01 | 06 | 02 | 01 | 06 | 10 | 02 | 05 | 03 | 09 | 02 | 03 | 11 | 06 | 19 | 15 | 00 | 06 | 11 | |
| 56 | 11 | 03 | 12 | 06 | 14 | 04 | 12 | 04 | 13 | 11 | 16 | 06 | 13 | 02 | 00 | 03 | 05 | 00 | 08 | 07 | 05 | 06 | 05 | 01 | 07 | 05 | 12 | 16 | 18 | 10 | 14 | 11 | |
| 57 | 04 | 01 | 09 | 03 | 06 | 01 | 02 | 08 | 03 | 05 | 09 | 15 | 08 | 14 | 07 | 43 | 11 | 06 | 04 | 13 | 08 | 01 | 07 | 14 | 01 | 10 | 12 | 11 | 11 | 02 | 03 | 11 | |
| 58 | 01 | 14 | 07 | 00 | 02 | 06 | 07 | 10 | 05 | 10 | 13 | 12 | 12 | 03 | 10 | 05 | 01 | 04 | 11 | 04 | 01 | 01 | 04 | 14 | 07 | 05 | 00 | 03 | 02 | 02 | 08 | 12 | |
| 59 | 15</ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64

1.00
11 99 74 72 1.00
12 98 73 71 1.00
13 97 70 69 1.00
14 96 68 67 1.00
15 95 66 65 1.00
16 94 64 63 1.00
17 93 62 61 1.00
18 92 60 59 1.00
19 91 58 57 1.00
20 90 56 55 1.00
21 89 54 53 1.00
22 88 52 51 1.00
23 87 50 49 1.00
24 86 48 47 1.00
25 85 46 45 1.00
26 84 44 43 1.00
27 83 42 41 1.00
28 82 40 39 1.00
29 81 38 37 1.00
30 80 36 35 1.00
31 79 34 33 1.00
32 78 32 31 1.00
33 77 30 29 1.00
34 76 28 27 1.00
35 75 26 25 1.00
36 74 24 23 1.00
37 73 22 21 1.00
38 72 20 19 1.00
39 71 18 17 1.00
40 70 16 15 1.00
41 69 14 13 1.00
42 68 12 11 1.00
43 67 10 9 1.00
44 66 8 7 1.00
45 65 6 5 1.00
46 64 4 3 1.00
47 63 2 1 1.00
48 62 0 0 1.00
49 61 0 0 1.00
50 60 0 0 1.00
51 59 0 0 1.00
52 58 0 0 1.00
53 57 0 0 1.00
54 56 0 0 1.00
55 55 0 0 1.00
56 54 0 0 1.00
57 53 0 0 1.00
58 52 0 0 1.00
59 51 0 0 1.00
60 50 0 0 1.00
61 49 0 0 1.00
62 48 0 0 1.00
63 47 0 0 1.00
64 46 0 0 1.00

APPENDIX F

FACTOR MATCH OF ORIGINAL AND REVISED OCDQ

FACTOR MATCH OF ORIGINAL AND REVISED OCDQ

| | | Revised OCDQ Factors | | | | | | | |
|-----------------------|----|----------------------|------------|------------|------------|------------|------------|------------|------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Original OCDQ Factors | 1 | <u>.97</u> | .02 | .06 | .10 | .08 | .07 | .11 | .16 |
| | 2 | .04 | <u>.92</u> | .11 | .08 | .04 | .11 | .14 | .32 |
| | 3 | .04 | .11 | <u>.96</u> | .04 | .01 | .13 | .19 | .12 |
| | 4 | .02 | .23 | .07 | <u>.80</u> | .01 | .44 | .22 | .23 |
| | 5 | .08 | .03 | .02 | .03 | <u>.99</u> | .10 | .08 | .02 |
| | 6 | .22 | .24 | .10 | .56 | .01 | <u>.41</u> | .33 | .55 |
| | 7 | .03 | .01 | .15 | .03 | .11 | .38 | <u>.87</u> | .24 |
| | 8. | .02 | .18 | .18 | .17 | .08 | .66 | .09 | <u>.67</u> |

Note: All negative correlation signs have been omitted.

APPENDIX G

OCDQ SUBTEST SCORES BY INTERMEDIATE DISTRICT*

OCDQ SUBTEST SCORES BY INTERMEDIATE DISTRICT*

| Districts | OCDQ Subtest Scores | | | | | | |
|-----------|---------------------|----------|--------|----------|------------|------------------------|---------------|
| | Disengagement | Hindrane | Esprit | Intimacy | Alloofness | Production Emphasis | Consideration |
| 01 | 44 | 52 | 48 | 52 | 48 | 43 | 46 |
| 05 | 55 | 51 | 48 | 50 | 53 | 46 | 42 |
| 07 | 45 | 45 | 56 | 53 | 49 | 55 | 54 |
| 11 | 50 | 49 | 53 | 54 | 48 | 50 | 54 |
| 18 | 46 | 47 | 53 | 48 | 48 | 45 | 47 |
| 19 | 52 | 55 | 46 | 46 | 51 | 50 | 52 |
| 23 | 55 | 53 | 44 | 56 | 52 | 56 | 49 |
| 29 | 48 | 48 | 61 | 55 | 47 | 54 | 62 |
| 30 | 41 | 46 | 55 | 53 | 51 | 62 | 57 |
| 34 | 51 | 42 | 36 | 42 | 50 | 45 | 36 |
| 39 | 49 | 52 | 46 | 48 | 46 | 55 | 45 |
| 42 | 46 | 49 | 51 | 50 | 49 | 48 | 52 |
| 53 | 54 | 59 | 48 | 50 | 58 | 51 | 50 |
| 56 | 52 | 48 | 50 | 54 | 53 | 50 | 48 |
| 60 | 45 | 49 | 50 | 49 | 51 | 45 | 48 |
| 62 | 42 | 48 | 45 | 45 | 42 | 50 | 48 |
| 63 | 47 | 54 | 48 | 46 | 46 | 51 | 48 |
| 65 | 46 | 54 | 41 | 54 | 53 | 47 | 51 |
| 67 | 55 | 49 | 42 | 45 | 54 | 49 | 44 |
| 68 | 59 | 46 | 45 | 51 | 49 | 45 | 49 |
| 70 | 52 | 45 | 53 | 48 | 48 | 56 | 54 |
| 73 | 51 | 46 | 55 | 49 | 49 | 52 | 49 |
| 75 | 43 | 51 | 54 | 51 | 48 | 51 | 53 |
| 77 | 54 | 53 | 49 | 47 | 51 | 45 | 43 |
| 79 | 58 | 52 | 43 | 47 | 59 | 50 | 47 |
| 80 | 49 | 55 | 45 | 39 | 52 | 48 | 43 |
| 85 | 51 | 50 | 47 | 49 | 48 | 41 | 48 |
| 88 | 45 | 47 | 52 | 43 | 46 | 56 | 41 |
| 93 | 52 | 50 | 47 | 49 | 54 | 43 | 55 |

*Note: Scores are standardized with a mean of 50 and a standard deviation of 10.

APPENDIX H

PER CENT OF RESPONSES ON SOURCE OF INFORMATION BY EMPLOYMENT POSITION

APPENDIX H.--Per cent of responses on source of information by employment position.

| Position | N | Intermediate Directors | Intermediate Staff | Local Special Ed. Staff | Lay Persons | State Department Consultants | Professional Conventions | Professional Journals | Intermediate Newsletters | State Department Publications | Radio - T.V. Newspapers |
|----------------------------|------------|------------------------|--------------------|-------------------------|-------------|------------------------------|--------------------------|-----------------------|--------------------------|-------------------------------|-------------------------|
| 1 Director | 29 6% | 48 | 86 | 45 | 10 | 69 | 69 | 79 | 14 | 38 | 17 |
| 2 Supervisor | 25 5% | 56 | 88 | 28 | 4 | 28 | 84 | 72 | 16 | 28 | 12 |
| 3 Diagnos- tician | 74 14% | 66 | 72 | 32 | 8 | 22 | 81 | 78 | 11 | 12 | 27 |
| 4 Social Wk. | 88 17% | 51 | 69 | 33 | 10 | 20 | 76 | 78 | 18 | 24 | 32 |
| 5 Speech Cor. | 128 25% | 57 | 86 | 37 | 5 | 12 | 86 | 71 | 17 | 9 | 27 |
| 6 Type C. | 33 6% | 58 | 79 | 48 | 12 | 39 | 76 | 58 | 12 | 33 | 27 |
| 7 Type 4. | 46 9% | 50 | 87 | 37 | 13 | 26 | 80 | 74 | 20 | 13 | 26 |
| 8 Hospital Homebound | 43 8% | 63 | 72 | 21 | 7 | 23 | 74 | 72 | 23 | 21 | 37 |
| 9 Other | 54 10% | 63 | 80 | 33 | 15 | 35 | 78 | 76 | 26 | 19 | 24 |
| % of Total Staff | % | 57 | 79 | 35 | 9 | 25 | 80 | 74 | 18 | 18 | 27 |

APPENDIX I

PER CENT OF RESPONSE ON SOURCE OF
INFORMATION BY INTERMEDIATE
DISTRICT

APPENDIX I.--Per cent of response on source of information
by intermediate district.

| District Code | Intermediate Directors | Intermediate Staff | Local Special Ed. Staff | Lay Persons | State Department Consultants | Professional Conventions | Professional Journals | Intermediate Newsletters | State Department Publications | Radio - T.V. Newspapers |
|------------------|---------------------------|-----------------------|----------------------------|----------------|---------------------------------|-----------------------------|--------------------------|-----------------------------|----------------------------------|----------------------------|
| 01 | 54 | 85 | 8 | 15 | 23 | 54 | 92 | 8 | 23 | 46 |
| 05 | 13 | 88 | 13 | 0 | 38 | 100 | 94 | 0 | 25 | 38 |
| 07 | 38 | 90 | 38 | 10 | 24 | 81 | 76 | 24 | 14 | 43 |
| 11 | 77 | 84 | 49 | 16 | 22 | 72 | 62 | 22 | 15 | 20 |
| 18 | 91 | 91 | 27 | 18 | 27 | 91 | 82 | 9 | 18 | 27 |
| 19 | 59 | 86 | 28 | 7 | 21 | 90 | 69 | 31 | 17 | 45 |
| 23 | 45 | 82 | 18 | 27 | 55 | 100 | 73 | 18 | 45 | 9 |
| 29 | 88 | 100 | 0 | 0 | 0 | 75 | 75 | 25 | 0 | 50 |
| 30 | 58 | 100 | 83 | 17 | 25 | 92 | 75 | 0 | 8 | 17 |
| 34 | 33 | 33 | 67 | 0 | 33 | 100 | 67 | 0 | 33 | 33 |
| 39 | 58 | 74 | 37 | 0 | 42 | 89 | 95 | 21 | 26 | 11 |
| 42 | 52 | 74 | 35 | 13 | 26 | 83 | 74 | 22 | 9 | 39 |
| 53 | 61 | 88 | 36 | 12 | 24 | 79 | 85 | 15 | 18 | 30 |
| 56 | 73 | 73 | 18 | 0 | 27 | 68 | 64 | 14 | 9 | 14 |
| 60 | 64 | 86 | 43 | 0 | 36 | 79 | 71 | 50 | 50 | 36 |
| 62 | 100 | 83 | 33 | 0 | 33 | 100 | 100 | 0 | 17 | 17 |
| 63 | 6 | 67 | 28 | 17 | 17 | 72 | 78 | 6 | 6 | 22 |
| 65 | 33 | 33 | 33 | 0 | 33 | 100 | 0 | 33 | 33 | 33 |
| 67 | 50 | 50 | 20 | 0 | 30 | 70 | 70 | 0 | 20 | 30 |
| 68 | 53 | 53 | 27 | 7 | 13 | 73 | 87 | 7 | 7 | 27 |
| 70 | 80 | 87 | 40 | 7 | 20 | 93 | 87 | 13 | 40 | 47 |
| 73 | 38 | 70 | 32 | 8 | 14 | 80 | 70 | 16 | 12 | 18 |
| 75 | 60 | 80 | 20 | 0 | 10 | 80 | 80 | 20 | 30 | 40 |
| 77 | 56 | 88 | 31 | 13 | 25 | 50 | 44 | 13 | 6 | 13 |
| 79 | 60 | 53 | 27 | 7 | 27 | 73 | 87 | 20 | 40 | 20 |
| 80 | 23 | 54 | 23 | 0 | 31 | 85 | 85 | 8 | 15 | 31 |
| 85 | 64 | 100 | 71 | 14 | 36 | 79 | 86 | 29 | 14 | 43 |
| 88 | 57 | 86 | 14 | 0 | 43 | 86 | 71 | 14 | 14 | 29 |
| 93 | 85 | 80 | 50 | 0 | 30 | 85 | 50 | 25 | 30 | 5 |
| % of Total | 13.6 | 18.8 | 8.2 | 2.1 | 5.9 | 18.9 | 17.5 | 4.2 | 4.4 | 6.4 |

Responses N = 2190

APPENDIX J

COMMUNICATION VARIABLE SCORES BY
INTERMEDIATE DISTRICT

APPENDIX J.--Communication variable scores by intermediate district.

| District Code Number | Communication Variables | | | | | | |
|---------------------------------|--------------------------|-------------------------------|-----------------------|--------------------------------------|---|-------------------------------|----------------------------------|
| | Mass Media Sources | Inter- Personal Sources | Opinion Leadership | Staff Professional Involvement | Director Professional Involvement | Staff Cosmopolite- ness | Director Cosmopolite- ness |
| 01 | 2.23 | 1.85 | .42 | 6.42 | 13 | 6.50 | 24 |
| 05 | 2.56 | 1.50 | .25 | 4.00 | 4 | 6.56 | 5 |
| 07 | 2.38 | 2.00 | .30 | 4.40 | 12 | 6.10 | 10 |
| 11 | 1.91 | 2.47 | .37 | 8.96 | 9 | 6.29 | 52 |
| 18 | 2.27 | 2.55 | .90 | 4.90 | 13 | 4.80 | 20 |
| 19 | 2.52 | 2.00 | .50 | 4.46 | 7 | 7.82 | 25 |
| 23 | 2.45 | 2.27 | .60 | 5.90 | 8 | 8.80 | 00 |
| 29 | 2.25 | 1.88 | .71 | 5.86 | 16 | 8.71 | 40 |
| 30 | 1.92 | 2.83 | .64 | 3.09 | 6 | 3.82 | 105 |
| 34 | 2.33 | 1.67 | 1.00 | 4.00 | 7 | 4.00 | 12 |
| 39 | 2.42 | 2.11 | .55 | 7.17 | 7 | 5.61 | 25 |
| 42 | 2.26 | 2.00 | .55 | 4.86 | 12 | 9.00 | 25 |
| 53 | 2.27 | 2.21 | .19 | 5.72 | 9 | 5.81 | 20 |
| 56 | 1.68 | 1.91 | .86 | 6.71 | 5 | 3.66 | 5 |
| 60 | 2.86 | 2.29 | .69 | 6.54 | 8 | 7.92 | 11 |
| 62 | 2.33 | 2.50 | .40 | 4.00 | 6 | 4.00 | 8 |
| 63 | 1.83 | 1.33 | .29 | 3.35 | 1 | 4.12 | 10 |
| 65 | 2.00 | 1.33 | 1.00 | 5.00 | 10 | 8.00 | 30 |
| 67 | 1.90 | 1.50 | .67 | 5.78 | 9 | 6.33 | 30 |
| 68 | 2.00 | 1.53 | .57 | 6.50 | 13 | 4.29 | 30 |
| 70 | 2.80 | 2.33 | .71 | 4.14 | 6 | 4.29 | 22 |
| 73 | 1.96 | 1.62 | .63 | 5.71 | 6 | 10.35 | 25 |
| 75 | 2.50 | 1.70 | .44 | 3.89 | 4 | 5.11 | 10 |
| 77 | 1.25 | 2.13 | .53 | 5.20 | 4 | 5.40 | 4 |
| 79 | 2.40 | 1.73 | .86 | 6.07 | 10 | 2.93 | 7 |
| 80 | 2.23 | 1.31 | .83 | 5.67 | 11 | 4.08 | 35 |
| 85 | 2.50 | 2.86 | .62 | 4.23 | 4 | 5.54 | 60 |
| 88 | 2.14 | 2.00 | 1.00 | 4.17 | 7 | 3.33 | 8 |
| 93 | 1.95 | 2.45 | .79 | 3.68 | 8 | 4.21 | 12 |
| Mean for Total Population | 2.21 | 2.00 | .62 | 5.19 | 8.10 | 5.77 | 23.10 |

APPENDIX K

INTERMEDIATE SCHOOL DISTRICT INNOVATIVENESS SCALE

INTERMEDIATE SCHOOL DISTRICT INNOVATIVENESS SCALE

The following is a list of programs, practices, and procedures for intermediate school districts which are relatively new. Indicate the status of each program, practice, or procedure within your intermediate school district using the following scale:

1. Not aware of this program, practice, or procedure.
2. Aware of this program, practice, or procedure.
3. In trial or planning stage.
4. Fully adopted or in use.
5. Adopted previously but has been discontinued. Why?
6. This program, practice, or procedure is not applicable to this intermediate district. Why?

If you have discontinued the program, practice or procedure or feel that it is not applicable to your intermediate district, please indicate why.

Circle the appropriate response to the left of each item.

Programs, Practices or Procedures.

- | | |
|-------------|--|
| 1 2 3 4 5 6 | 1. Instructional Materials Center operated by the intermediate school district. |
| 1 2 3 4 5 5 | 2. Cooperative inservice training program with other intermediate school districts on a regularly scheduled basis. |
| 1 2 3 4 5 6 | 3. Consultant in learning disabilities employed by the intermediate office. |
| 1 2 3 4 5 6 | 4. Mobile Instructional Materials Van which visits constituent districts. |
| 1 2 3 4 5 6 | 5. Comprehensive and integrated plan for meeting special education needs for the entire intermediate district area. |
| 1 2 3 4 5 6 | 6. Development of specialized instructional programs such as recorded instructional materials, films, or printed materials by the intermediate office. |
| 1 2 3 4 5 6 | 7. Inservice training programs held prior to the regular school year for intermediate special education staff. |
| 1 2 3 4 5 6 | 8. Pre-school programs for rubella children operated or contracted by the intermediate office. |

- | | |
|----------------------------|--------------------------|
| 1. Not aware of | 4. Adopted - in use. |
| 2. Aware of | 5. Discontinued - why? |
| 3. Trial or planning stage | 6. Not applicable - why? |
| * * * * * | |
-
- | | |
|-------------|--|
| 1 2 3 4 5 6 | 9. Research consultant employed at least one-half time by the intermediate office. |
| 1 2 3 4 5 6 | 10. Area Vocational Center operated jointly by special education, vocational education and vocational-rehabilitation. |
| 1 2 3 4 5 6 | 11. Educational program operated in cooperation with a residential mental health facility. |
| 1 2 3 4 5 6 | 12. Program for low incidence disability area operated in cooperation with other intermediate school districts. |
| 1 2 3 4 5 6 | 13. Day Training Program for severely mentally retarded operated or contracted by intermediate school district in cooperation with a mental health agency. |
| 1 2 3 4 5 6 | 14. Telephone instruction used by intermediate teacher of homebound and hospitalized. |
| 1 2 3 4 5 6 | 15. Federal projects' coordinator or grantsman employed at least one-half time by the intermediate school district. |
| 1 2 3 4 5 6 | 16. Program for pregnant girls operated or contracted by intermediate school district. |
| 1 2 3 4 5 6 | 17. Home training program that combines home visits with parent visits to a center for the severely handicapped and pre-school handicapped operated or contracted by the intermediate school district. |
| 1 2 3 4 5 6 | 18. Computerized scheduling of classes for special education students by the intermediate school district office. |
| 1 2 3 4 5 6 | 19. Transportation contracted with a private company or individual. |
| 1 2 3 4 5 6 | 20. Pre-school programs for all severely handicapped children for early intervention and diagnostic purpose operated or contracted by the intermediate school district. |

- | | | | |
|-----------|-------------------------|----|-----------------------|
| 1. | Not aware of | 4. | Adopted - in use. |
| 2. | Aware of | 5. | Discontinued - why? |
| 3. | Trial or planning stage | 6. | Not applicable - why? |
| * * * * * | | | |

- | | | | | | | | |
|---|---|---|---|---|---|-----|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 21. | Organized parent groups participating in program planning. |
| 1 | 2 | 3 | 4 | 5 | 6 | 22. | Central referral service for all handicapped children in the intermediate school district. |
| 1 | 2 | 3 | 4 | 5 | 6 | 23. | Central information and record keeping service for handicapped children for the intermediate district. |
| 1 | 2 | 3 | 4 | 5 | 6 | 24. | Intermediate funds set aside for direct payment of expenses of local personnel who attend professional conventions or conferences. |
| 1 | 2 | 3 | 4 | 5 | 6 | 25. | Citizens' advisory board for special education programs in the intermediate school district. |
| 1 | 2 | 3 | 4 | 5 | 6 | 26. | Recruitment of regular teachers to become special education teachers through an internship program in cooperation with a university. |
| 1 | 2 | 3 | 4 | 5 | 6 | 27. | Curriculum resource consultant for special education employed by the intermediate school district. |
| 1 | 2 | 3 | 4 | 5 | 6 | 28. | Art, music, or physical education consultant for special education employed by the intermediate school district. |

Please list any new programs, practices or procedures which are being considered or are in use by your intermediate school district. Indicate the stage of development for each item listed. i.e. 1. adopted or in use; 2. in trial or planning stage.

1 2 _____

1 2 _____

APPENDIX L

INNOVATIVENESS SCORES OF INTERMEDIATE
SPECIAL EDUCATION DEPARTMENTS

APPENDIX L.--Innovativeness scores of Intermediate special
education departments.

| District Code Number | Innovativeness Score | District Code Number | Innovativeness Score |
|----------------------------|-------------------------|----------------------------|-------------------------|
| 01 | 52 | 62 | 59 |
| 05 | 61 | 63 | 45 |
| 07 | 55 | 65 | 38 |
| 11 | 64 | 67 | 51 |
| 18 | 46 | 68 | 54 |
| 19 | 47 | 70 | 47 |
| 23 | 49 | 73 | 60 |
| 29 | 58 | 75 | 46 |
| 30 | 49 | 77 | 50 |
| 34 | 42 | 79 | 60 |
| 39 | 51 | 80 | 50 |
| 42 | 59 | 85 | 45 |
| 53 | 55 | 88 | 56 |
| 56 | 55 | 93 | 49 |
| 60 | 55 | | |

Mean for population = 52.0

Standard Deviation for Population = 6.26

APPENDIX M

PROGRAMS, PRACTICES AND PROCEDURES
ADOPTED BY LESS THAN 50% OF THE
POPULATION AND DEFINED
AS INNOVATIONS

APPENDIX M.--Programs, practices and procedures adopted by
less than 50% of the population and
defined as innovations.

| ISDIS Item Number | Per cent of Adoption |
|----------------------|-------------------------|
| 2 | 28% |
| 3 | 34% |
| 4 | 24% |
| 5 | 41% |
| 6 | 38% |
| 9 | 7% |
| 10 | 17% |
| 11 | 34% |
| 12 | 41% |
| 13 | 48% |
| 14 | 24% |
| 15 | 34% |
| 17 | 28% |
| 18 | 14% |
| 20 | 34% |
| 21 | 45% |
| 24 | 45% |
| 27 | 31% |
| 28 | 3% |