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AS PERCEIVED BY SCHOOL PSYCHOLOGISTS AND  
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THE ROLE OF THE SCHOOL PSYCHOLOGIST IN MICHIGAN  
AS PERCEIVED BY SCHOOL PSYCHOLOGISTS  
AND DIRECTORS OF SPECIAL  
EDUCATION

By

Nicholas Bernard Fridsma

A DISSERTATION

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## CHAPTER I

### INTRODUCTION

#### Problem

The present role of the school psychologist in Michigan is in a process of transformation. To gain some insight into the changes which are taking place it is necessary to understand the State Program for the Education of the Mentally Handicapped which was initiated by the Michigan Department of Public Instruction in 1949 by Act 214. The title, "School Diagnostician for the Mentally Handicapped Program," was selected in 1958 for those persons responsible for identifying children for the educational programs for the mentally handicapped. The function of the School Diagnostician was described in a Michigan Department of Public Instruction monograph (1958) as follows:

The School Diagnostician has major responsibility for the study of children referred as candidates for Mentally Handicapped Programs . . . . The identification and assessment of mentally handicapped children is the chief task of the School Diagnostician.

As recently as 1966 the Michigan Department of Public Instruction in a monograph suggested that the School Diagnostician "serves only that portion of the school membership who are referred as possible mentally handicapped pupils. He must serve the mentally handicapped program full time."

During the 1960's school psychology in Michigan faced many problems. It was a period of rapid growth in the number of school

psychologists. Many school psychologists felt frustrated because they were limited to function only in the mentally handicapped program while their training had prepared them for broader functioning in the schools. The 1960's saw Michigan school diagnosticians divided into two professional groups: The Michigan Society of School Psychologists affiliated with the Michigan Psychological Association and the Michigan Association of Educator Psychologists affiliated with the Michigan Education Association.

Three events have occurred since 1970, however, which have been encouraging to school psychology in Michigan and have helped to precipitate change in the role. The first was the founding of the Michigan Association of School Psychologists in 1970 which dissolved the two previous professional groups. For the first time in Michigan, school psychologists were able to speak with one voice.

The second event was the passage of the Mandatory Special Education bill in December of 1971, making Special Education programs mandatory for all physically, emotionally, and mentally handicapped children by the Fall of 1973.

The third event was the passage of House Bill 5560 which became Public Law 353 on January 9, 1973. This bill provided for comprehensive school psychological services for all children and effectively changed the title School Diagnostician for the Mentally Handicapped Program to that of School Psychologist.

The mandatory bill and the comprehensive psychological services bill did not, however, specifically define the role of the school psychologist. The legislation pointed to the necessity for expanding

the role of the school psychologist to include psychological services for all handicapped children, but it did not specify any of the details related to the activities of the school psychologists and the relative importance of these activities.

Changes in the role of the school psychologist are also taking place on a national level. John Guiderbaldi (1973, p. 1) suggests that "school psychology is involved in a full blown identity crisis." He continues, ". . . no well integrated or successfully tested roles emerge as clearly relevant and feasible for school psychology." Catteral and Hinds (1972, p. 15) in speaking for school psychologists state, "Although educators still desire to make use of the special talents and skills of school psychologists, it is becoming evident that we need to develop a new public image of how we will best be able to fill a felt need within the system." Farling (1972, p. 3), a school psychologist, states, "Whether our services continue to be considered as necessary to special education in the future is really questionable."

This turmoil is due to many changes taking place within special education nationally. Emphasis upon integrating children into the mainstream of education as suggested by Dunn (1968) has created the need to plan educational programs for children on an individual and prescriptive basis. The resource room concept is beginning to be implemented into special education programs. The emphasis upon programming for learning disabilities, perceptual handicaps, and emotional problems has opened a gap in services into which the school psychologist may fit. New understandings of IQ and the importance of cultural influences upon children's learning (Coleman, 1966) has created new problems in education.

Changes in general education also have implications for school psychologists. Emphasis upon individualization of learning and greater flexibility in programs has resulted in the development of new options for handicapped children in the mainstream of education such as the utilization of resource room programs, teacher aides, and individualized instruction. Accountability for the education of children has been placed upon school districts, and regular education programs can no longer dismiss "problem" children as readily.

The courts also have been influential in making educational changes which directly affect the role of the school psychologist. Ross, et al. (1971) have summarized some of these findings:

1. Psychologists must test children in their primary language.  
(Diana v. California State Board of Education, 1970)
2. Tracking systems have been found to discriminate against the students in them. (Hobson v. Hansen, 1967)
3. Parents must be included in major educational decisions which affect their children. (Arreola v. California Board of Education, 1968)

A new emphasis upon "due process" is evident in the growing interest in the rights of children and parents. It is clear that school psychologists must learn how to use the law to meet the needs of children and avoid doing anything against the rights of children or their parents.

#### Need for the Study

The preceding discussion points out some of the changes taking place in education in Michigan and nationally which have implications



for school psychologists and their role in the future. It is becoming increasingly apparent that the role of the school psychologist in Michigan is in need of redefinition and clarification in the light of the changes taking place in education. This study is an attempt to provide greater clarification of this role. It has important implications as follows:

1. For the State Department of Education.--It should provide relevant information to the State Department of Education concerning the ideal role of the school psychologist in Michigan and the relative importance of his activities as perceived by directors of special education and school psychologists. It should be helpful in overall state planning for the school psychology program by pointing out areas in which the role is changing. It should also be helpful in planning state-wide inservice meetings for school psychologists by providing information regarding the areas in which skills and competencies need to be improved.

2. For University Training Programs.--With increased knowledge of how the role of the school psychologist is perceived by those out in the field, the universities will be enabled to better assess the needs of their school psychology training programs and possibly to develop new training models and inservice programs for school psychologists.

3. For Special Education Administrators.--It should provide the directors of special education with a better understanding of the perceived role of the school psychologist. With a knowledge of what kinds of activities are considered important for school psychologists to

perform as perceived by both school psychologists and directors of special education, the directors should be able to improve upon the delivery system of special education services and be able to contribute to the efficiency of school psychological services.

4. For School Psychologists.--It should provide information to school psychologists to enable them to critically review their role in the schools and their relationship to special education. By pointing out the relative importance of school psychological activities as perceived by the respondents, it should help to clarify the school psychologists' role and their activities within that role.

A better understanding of the different role perceptions held by the school psychologists and directors of special education should hopefully lead to improved interaction between the two groups. This study, by pointing out the perceived relative importance of the many varied activities of the school psychologist, should provide a better understanding of the role of the school psychologist in Michigan for all educators interested in providing improved educational programs for children.

#### Purpose of the Study

This study deals with both the general and specific activities of the school psychologist in Michigan. It is not limited to merely the diagnostic activity but rather it will take a broader perspective which includes a variety of different activities. It places emphasis upon what the school psychologist wishes to do in his ideal role rather than upon what he is doing at the present time in his role.

It is important that directors of special education be included in this study. The directors are generally aware of the activities of the school psychologist through the interaction of the school psychologist with the special education personnel on his staff. In many cases the director of special education is the school psychologist's immediate supervisor. Both the school psychologist and the director of special education are involved in the educational planning for handicapped children. Frequently, the role that a school psychologist assumes is directly related to the philosophy and expectations of the director of special education who coordinates education programs for handicapped children.

The purpose of this study is to arrive at a new understanding of the activities of the school psychologist in Michigan and of the relative time and energy to be devoted to these activities based upon the perceptions of both school psychologists and directors of special education. In order to understand the concept of role as utilized in this study, it is important to differentiate between what Sarbin (1968) calls "role enactment" and "role expectation." Role enactment focuses on "overt social conduct" whereas role expectations are "collections of cognitions--beliefs, subjective probabilities, and elements of knowledge--which specify in relation to complementary roles the rights and duties, the appropriate conduct, for persons occupying a particular position" (Sarbin, 1968, p. 498). This study focuses upon "role expectation," that is, what school psychologists and directors of special education in Michigan perceive the role to be rather than the actual carrying out of activities.

### Overview of the Study

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

In Chapter II literature relevant to this study is reviewed.

In Chapter III the methodology used in the study will be discussed. The questionnaire, "The Role of the School Psychologist in Michigan" along with definition of terms and hypotheses will be explained.

Chapter IV contains the results of the statistical analysis of the obtained data.

Chapter V presents a summary of the data, the conclusions reached, and recommendations which may be useful to the School Psychology program in Michigan.

## CHAPTER II

### RELEVANT LITERATURE

#### Introduction

This chapter summarizes the research and literature which pertain to the role of the school psychologist and is relevant to this particular study. The first section deals briefly with the history of school psychology in the United States and traces the evolutionary development of the role. The second section discusses briefly some of the more recent changes in the functions of the school psychologist. The third section reviews briefly some of the studies of the role of the school psychologist in other states and nationally. The fourth section reviews studies of the school psychologist in Michigan. A brief summary of the relevant literature concludes this chapter.

#### History of School Psychology in the United States

In order to gain a better understanding of the reason for this study, a brief discussion of the history of school psychology is necessary. Helping handicapped children prior to 1900 was generally disability oriented with a strong medical and clinical orientation. Handicapped children were generally taken from schools and placed in special institutions. Around the turn of the century the interest in the identification and placement of problem children pointed out the need for special knowledge and techniques. According to Eiserer (1963),

the first psychological clinic which focused on the learning problems of children was established in 1896 by Witmer at the University of Pennsylvania. In 1899, the first public school Department of Child Study and Pedagogic Investigation was established in Chicago. In 1908, the emergence of the Mental Health Movement and child guidance clinics gave an impetus to the movement (White and Harris, 1961). The development of the Binet-Simon Tests of Intelligence in 1904 made a significant contribution (Gray, 1963). Gray (1963) and Cutts (1955) point out that from 1900 to the present the history of school psychology was closely tied in with the development of special programs for the retarded, and as such it was clinical and diagnostic in orientation. According to Symonds (1942) the term "school psychologist" was first used by Hutt in 1923.

Slowly the States began to pass certification requirements to prevent unqualified persons from engaging in psychological evaluations. New York was the first state in 1935 to certify such a person (Hodges, 1960). In 1960, there were 23 states and Washington D.C. which had certification requirements (Hodges, 1960). In 1970, certification was required in 37 states (Bennett, 1970).

According to various surveys the number of school psychologists has increased from 1 in 1900 to 520 in 1950, 2724 in 1960, and 5000 in 1967 (Magary and Menchan, 1963; Phi Delta Kappan, 1967; Bennett, 1970). The marked increase of school psychologists after World War II was due to a feeling of urgency to improve the quality of education for all children and an increasing demand for special education services (Eiserer, 1963; Hodges, 1960).

In 1946, Division 16 of the American Psychological Association was organized to serve the professional needs of school psychologists who realized the need for better and increased communication among themselves. In 1954, Division 16 of A.P.A. organized the Thayer Conference at West Point, New York, on August 22-31. The purpose of this conference was to officially recognize the role of the school psychologist and outline the duties, responsibilities, functions, competencies, and training needs for the first time.

The basic conclusions of the conference were as follows:

1. Definition: "The school psychologist is a psychologist with training and experience in education. He uses his specialized knowledge of assessment, learning, and interpersonal relationships to assist school personnel to enrich the experience and growth of all children, and to recognize and deal with exceptional children" (Cutts, 1955, p. 30).
2. Functions: (Cutts, p. 30)
  - A. Measuring and interpreting the intellectual, social, and emotional development of children.
  - B. Identifying exceptional children and collaborating in the planning of appropriate educational and social placements and programs.
  - C. Developing ways to facilitate the learning and adjustment of children.
  - D. Encouraging and initiating research, and helping to utilize research findings for the solution of school problems.

E. Diagnosing educational and personal disabilities, and collaborating in the planning of re-educational programs.

There was considerable discussion at the conference concerning the role of psychotherapy in school psychological practice.

Although there was agreement in general that it should be carried out, there was no agreement concerning psychotherapeutic procedures to use and the extent to which it could be regarded as a proper function of the school psychologist (Cutts, 1955).

There was a debate over the definition of psychotherapy. There was agreement that psychotherapy be practiced only by doctoral level personnel.

3. The Thayer Conference also discussed the qualifications needed by school psychologists, levels of training, principles of training, and safeguards against unqualified personnel. Two levels of training were agreed upon: school psychologist with a Ph.D requirement and psychological examiner with a M.A. requirement.

The Thayer Conference was important in that it recognized the profession of school psychology for the first time and recognized the potentialities of the school psychologist in relation to the many-faceted needs of the educational enterprise. According to Magary (1967), it marked a turning point in the field of school psychology. However it appeared that the conference was more concerned about maintaining standards than meeting the shortage of personnel in the field and meeting the needs of school children. Also, the clinical-diagnostic orientation was fairly pervasive. The Conference made its contribution



by emphasizing the mix of psychology and education and the diagnostic, consulting, and research roles of the school psychologist. The emphasis on doctoral level training may have been unrealistic in terms of pressing manpower needs.

In 1958, a committee from A.P.A. Division 16 wrote a report entitled, "The Psychologist on the School Staff." This report put greater emphasis upon the liaison between psychology and education. It put emphasis on service to the school in matters of administration, policy, and curriculum. According to Valett (1963) this report pointed out that there were three general areas of functioning: psychological counseling and guidance, consultation, and individual psychological evaluation.

Bardon (1965) in 1964 attested to the fact that there was a lack of a clear definition of school psychology. In that year the Bethesda Conference was sponsored by the American Psychological Association for the purpose of directing attention to the role of the school psychologist. The Conference recommended that encouragement be given to the collection of data concerning the developing school psychologist role since there was not available any statement concerning what school psychologists were doing and what should be expected of them.

Up to this time there was little leadership at a national level for school psychology. Division 16 of the American Psychological Association had not been very effective since its admissions standards were high and the majority of practicing school psychologists were not members. With the rapid growth of school psychology since 1950, there had not been a concomitant increase in communication among school psychologists. Response to inquiries sent by the Ohio School Psychologists' Association to school psychologists in various parts of the

United States indicated a keen interest in developing better communication and establishing national purposes and goals. An initial meeting was held in March, 1968, in Columbus, Ohio. Farling (1968) at this meeting made a plea for national guidelines regarding the role and function of the school psychologist. The following year on March 14, 1969, the National Association of School Psychologists was founded in St. Louis. One of its first projects was to undertake a study of the role of the school psychologist in the United States which is reported later in this chapter.

In summary the history of the school psychologist in the United States has been very brief since its beginning at the turn of the century. Its orientation during this time was generally a clinical-diagnostic orientation which reached its peak during the 1960's with the proliferation of special education classrooms and growth of special education programs in general. During the 1960's profound changes appeared to have taken place. The founding of the National Association of School Psychologists as a new vehicle of communication for school psychologists, the change in special education philosophy from segregated to integrated classrooms for handicapped children, and the emphasis on providing psychological services for all children had begun to have an impact upon the role of the school psychologist.

#### Recent Changes in the Activities of the School Psychologist

The changes taking place in the role of the school psychologist are pervasive and significant. The literature abounds with discussion

and research articles concerning these changes. The entire Journal of School Psychology, 10:2 (1972), for example, was devoted to changes in special education with implications for school psychology.

In general, as suggested by Herron, et al. (1970), there is less emphasis upon the clinical and diagnostic aspects of the role and an increasing interest in the processes of learning and teaching. Kennedy (1971) suggests that the clinical model is no longer practical and that the remedial aspects should be stressed rather than the diagnostic aspects. Bardon (1972, p. 208) in discussing diagnostic IQ tests states, "school psychologists need to develop alternate ways to assess behavior which are less controversial and which offer more direct assistance to the teachers." Some of the suggested changes in the school psychologist's role include at least seven activities which will be briefly mentioned. They may overlap to some extent but are discussed here for the ideas they convey rather than as mutually exclusive activities.

#### Educational Prescription and Remediation

Increasingly there is an emphasis upon educational and instructional strategies. Kennedy (1971), Forness (1970), Stephens (1970), Ashlock and Stephen (1966), Valett (1963), Reger (1965), and White and Harris (1961) all perceive remediation with a strong emphasis on the recommendation of specialized materials and techniques which are multi-sensory in nature as the key function of school psychologists.

Blanco (1971) placed great importance upon remediation. By surveying 146 school psychologists (10.8% of Division 16 of A.P.A.) he received

3700 psycho-educational recommendations to aid children, and he classified, edited, and compiled them into a manual for trainers and experienced professionals. Although this study may be criticized for its extremely small, unrepresentative sample and for its "cook book" approach to very complex problems, it illustrates the interest among school psychologists in remediation.

### Teacher Consultation

This particular activity emphasizes helping teachers implement educational strategies and transmitting educational and psychological knowledge and skills. The importance of a team approach, serving all children, and participating in inservice meetings are considered very important. Fine and Tyler (1971), Berkowitz (1968), Williams (1972), Gray (1963), Magary (1967), Carlson (1973), and Silverman (1969) all stress the importance of this role. Catteral (1970) in his model discusses four types of intervention strategies for school psychologists in their consultant role:

1. Things done around the student - Environmental Intervention
2. Things done to the student - Installed Intervention
3. Things that can be accomplished by the student - Assigned Intervention
4. Things that can be done with the student - Transactional Intervention

This approach focuses more on follow through and less on diagnosis. It looks at both the learner and the social setting.

### Behavior Management Consultation

Although this activity may overlap with the activity discussed immediately above, it is receiving so much attention that it is mentioned separately. With the emphasis upon education for all children and upon the education of handicapped children in regular classroom programs, teachers are desirous of obtaining information and techniques on how to manage children. The influence of Skinner (1938) and behavior modification strategies has also had an impact on the development of this activity. Hops (1971), Fine and Tyler (1971), Franks, Susskind, and Franks (1969), and Mayer (1973) have all emphasized this activity for school psychologists.

### Psychotherapy and Counseling

Jackson (1970) proposes a new model in which the school psychologist will be a therapeutic counselor who effects personality change and development in school "clients." This is a clinical orientation but with a new perspective in that psychometric testing will be assigned to psychometric assistants which would enable the school psychologist to practice individual, group, or facilitative therapy. Schimmoler (1971), Henriquez (1964), and White and Harris (1961) stress the importance of the therapy role. However, this role has been criticized by Kennedy (1971) who suggests that the clinical model is impractical because of the lack of sufficient manpower to do the job well.

### Community Relationships

Reilly (1969) suggests that there should be a relationship between the goals of the community and the goals of the school

psychologist. He suggests that the single largest contributor to the variance of a school system is the community and that this is the place to start. Gray (1963) and Valett (1963) stress the importance of community involvement.

Silberberg and Silberberg (1971) discuss an interesting topic in relation to the community. They ask the question whether or not school districts should subsidize community psycho-educational clinics. Being directly tied into the schools or educational establishment as is presently the case, the school psychologist limits his ability to be an agent for change within that school. Therefore, the school psychologist should function outside of the school environment and in a community setting. Brantley (1971) also discusses the concept of psycho-educational centers.

### Research

This role is increasingly being emphasized in the literature. Stephens (1970), Gray (1963), Ames (1971), and White and Harris (1961) all emphasize this role.

### Other Roles

Austin (1972) views school psychology as a value science and the school psychologist as an "axiologist." Silverman (1969) also sees school psychology as a value science in that the school psychologist cannot "remain neutral in the face of evaluative conflicts in a culture that is changing rapidly" (p. 27). This view is related to those who suggest that the school psychologist is a child advocate and must speak out for the legal and educational rights of children.

Catteral and Hinds (1972) see the emerging role of the school psychologist as a child advocate.

Gray (1963) points out that school psychologists must meet the needs of the school in two areas: school learning and mental health. Kennedy (1971) recommends developmental and preventive mental health programs.

Eiserer (1963) talks about five roles:

1. Assessment roles - evaluation of problem
2. Remedial roles - development of remedial plans
3. Consultant roles - to parents, community and school personnel
4. Educator roles - inservice and teacher training
5. Research roles - research

He suggests that the main goal of the school psychologist is "the continuing improvement of educational opportunity for all children and youth" (p. 108).

Herron, et al., (1970) perceive the school psychologist as an expert in the school whose job would be to maintain and enhance the school as a social learning system. They emphasize moving from a diagnostic role to consultation, remediation, and research. In their view the school psychologist would be a part of a team of educators, have a greater involvement in school, and will not be isolated behind the title of "psychologist."

Bennett (1970) discusses the wide variety of ways in which the

school psychologist functions, and he concludes there is no single "role."

The best statement of a modern eclectic view of the role of the school psychologist is articulated by Herron, et al. (1970). They suggest that the responsibility of the school psychologist begins and not ends with the process of evaluation. They discuss "educational modification" with emphasis on consultation, remediating, cooperative relations with school personnel, and research involvement. Use of paraprofessionals is encouraged. Recommendations need to be pertinent. There should be psychological services to all school children. Involvement with the community is encouraged. "Therapeutic modification" is suggested as a way to change attitudes of individuals, groups, and families.

In summary, it appears that all the changes in the school psychologist's role which are being discussed involve a change from a clinical-diagnostic model to a behavioristic, practical, and applied model. It is being suggested by many that school psychology should become school and teacher oriented with a strong emphasis on remediation and the recommendation of educational materials and techniques. Writers are stressing the need for a total ecological approach to the role of the school psychologist in which the school, parents, teachers, and the community are all involved. Total comprehensive psychological services for all children are being encouraged. The changing role was anticipated by Magary's definition of the school psychologist (1966, p. 341): He is one who "brings a psychological frame of reference to bear upon a set of school-related observations or



behaviors, with the end in view of facilitating learning, creativity, and self-actualization, for as many school children as possible."

Studies of the Role of the School Psychologist  
in other States and Nationally

A survey was conducted in 1954 at the Thayer Conference of 560 school psychologists from various size school districts throughout the United States (Cutts, 1955). The questionnaire contained a list of functions and asked that each be ranked in order of importance as a present function and then reranked according to how school psychologists should perform them to be maximally effective. In general, the ranks were the same for both present and desirable functions. "Individual testing" was ranked first and "interviews" ranked second in both present and desirable roles. The changes from present to desirable role were that "clerical" was lower and "special education programs" was higher. Following is the desirable role according to functions:

1. Individual testing
2. Interviews - pupils, parents, school personnel
3. Special education programs
4. Organizing, giving, interpreting group tests
5. Clerical
6. In-service training
7. Public relations
8. Administration and supervision
9. Remedial work in basic skills
10. Education programs - develop curriculum
11. Research

The strong emphasis on testing, interviewing, and special education programs and the lack of emphasis on remedial work and curriculum development suggests a strong diagnostic-clinical orientation rather than an applied orientation.

These findings are generally in agreement with two previous

studies. In 1950, 205 members of Division 16 of A.P.A. stated their major functions included individual testing, conferences, and group testing (Cutts, 1955). Also in 1950 the California Department of Education reported that school psychologists in California kept diaries of how their time was allotted; testing, conferences, and preparing case histories ranked highest and comprised 70% of their time.

Smith (1962) in an unpublished doctoral dissertation analyzed the role of the school psychologist in California. The study involved 178 administrators, 354 psychologists, and 27 faculty members. For eleven of the twelve functions, over 86% of the administrators and psychologists agreed that psychologists absolutely must or preferably should perform that function. Six of the twelve questions dealt with providing psychological services to different types of disability groups. A problem with the Smith study was that of looking at the role of the school psychologist in California from a very narrow, diagnostic perspective and not providing insight into the various kinds of activities in which school psychologists may become involved.

Roberts (1969) investigated the various roles of the school psychologist in Iowa as perceived by psychologists ( $N = 100$ ) and randomly selected school teachers from 21 school districts ( $N = 296$ ). This study solicited opinions regarding both the actual and desired role functions, and a seven-point scale was used to rate activities. Roles included psychometrician, diagnostician, consultant, mental hygienist, researcher, therapist, and educational programmer. Chi-square techniques indicated that teachers attach more importance to the

psychometrician role than do the psychologists. Both groups stated that more emphasis should be placed upon the mental hygienist and therapist role. The consultant role was viewed more favorably by psychologists than by teachers.

In an unpublished doctoral study of the self-role perception and cross-role perception of school counselors (N = 254), school social workers (N = 251), and school psychologists (N = 247) in Georgia, Gunter (1969) used the 146 item Pupil Personnel Specialist Inventory. The subjects ranked each item on a 4-point scale ranging from highly inappropriate to highly appropriate. Factor analysis was used to arrive at an empirical grouping of items. Results indicated that specific functions were uniquely and independently appropriate to each of the three roles and also that many functions were found to be shared by all three specialists.

Dansinger (1968) did a 5-year follow-up study of Minnesota psychologists in which they had to rank 16 functions. Individual testing and conferences were the most desired functions in both 1962 and 1967. Research, public relations, and work with special education programs decreased in importance from 1962 to 1967. Reduction in diagnostic and paper work was desired.

Tan (1968) in an unpublished doctoral dissertation studied the role of the school psychologist in Illinois as perceived by school psychologists and directors of special education. He obtained his data by use of a questionnaire which consisted of four sections: Personal Data, School Psychologists's Performance, School Psychologist's Participation, and School Psychologist's Attributes. The

sample population included 36 directors of special education and 102 school psychologists. Statistical analyses used in this study were the chi-square for testing the difference between opinions of the two respondent groups and the analysis of variance to determine the significance of the group means between the two groups.

The general conclusions of Tan's study were that the directors and psychologists in Illinois had similar perceptions of the role of the school psychologist. Differences of opinion were generally more of degree than of direction. School psychologists were more positive than the directors of special education in the following activities: diagnostic studies of the gifted, consultation with school board members about special education programs, and private practice for psychologists. Both groups emphasized strongly the diagnostic and consultation role of the school psychologist. The rank order correlation of the two groups in the 10 categories of the school psychologists' performances was .83 which indicated a close agreement between the two groups' perceptions. Both groups agreed that school psychologists should make diagnostic studies of all children.

According to Tan's study the rankings of the 10 categories of the school psychologist's performance were as follows:

	<u>Directors</u>	<u>Psychologists</u>
Diagnostic studies	1	1
Follow-up studies	2	5
Consultation to teachers	3	2
Special placement of children	4	3
Consultation to administrators	5	6
Conferences with pupils and parents	6	4
Research	7	8
Community Services	8	9
Curriculum planning	9	10
Psychotherapy	10	7

Tan's study had a "response set" built into it because the questionnaire was organized by categories which may have influenced how the respondents answered the items in that category. Also, some parts of his study dealt with trivial matters; for example, there were questions regarding whether or not the school psychologist was married, a parent, and well groomed and neat. In the rankings of the above mentioned ten functions it was unfortunate that these rankings were based only on present rather than desired functions so that role trends were not indicated.

Kirschner (1971) studied school psychology as viewed by supervisors of school psychological services. A total of 114 personnel directors from the largest metropolitan areas were asked to rank 12 functions on a four-point scale of importance. The highest ranking functions included teacher consultation, psychometric evaluation, screening for placement, parent counseling, and inservice. Remedial instruction and psychotherapy were ranked the lowest.

Most of the studies cited up to this point have been limited to one particular state or a particular population. As was mentioned previously there was a need for a national comprehensive study of the role of the school psychologist, and this task was undertaken by the National Association of School Psychologists (NASP) soon after its founding in St. Louis in 1969. This national survey, completed in 1970 by NASP, included responses from 5138 school psychologists. It was undertaken to provide comprehensive data regarding such things as training, certification requirements, background, professional affiliation, role and function, professional needs and problems, salary, and future developments.

The role and function of school psychologists as determined by this national study appeared to be dominated by activities of individual psycho-educational evaluation, report writing, and parent-teacher conferences. This was true for both the current role and ideal role projection. Individual counseling was also considered an important professional activity in both current and ideal projections. Greater emphasis was placed on consulting activities in the ideal role projection than in the current role. Regular and special program evaluation, behavioral management, and educational program planning were the most frequently identified areas for consultation in the ideal role projection.

According to the NASP study the skills most in need of development included psychological and educational diagnosis, educational programming, behavior modification planning, counseling, and professional communication. This indicated that the school psychologists desired to improve their roles as "change agents" and to place less emphasis on diagnosis and report writing.

When the school psychologists were asked in the NASP study about what internal aspects of school psychology needed the national attention of school psychologists for resolution within the profession, role and function were most frequently mentioned. One of the recommendations of the study was "That a national effort by professional school psychologists' associations be made to examine and clarify the current and future role and function of the school psychologist in terms of anticipated educational and mental health needs of students" (p. 84).

This was a very complete and thorough study and provided

much helpful information. However, the section on role and function was brief and global in emphasis. It also failed to ask to what extent school psychologists perform each activity and the importance of each activity.

### Studies of the School Psychologist in Michigan

Prior to 1960 there was no research concerning school psychology in Michigan. During the 1960's, however, there were a number of attempts to study some of the problems and trends in school psychological services. In 1962, the Detroit Public Schools studied the professional requirements and remuneration of school diagnosticians by means of a survey. Data from administrators from 43 school districts which had mentally handicapped programs were analyzed. Only one question on the survey pertained to the functions of the school diagnostician: "Please check those functions which are basic to your diagnosticians." The study assumed that the general function of the diagnostician was diagnostic testing of mentally handicapped children. The results are as follows: Parent Counseling - 94% of the administrators checked this function; Teacher Counseling - 66%; Case history development - 66%; Pupil counseling - 51%; Curriculum development - 31%; Teacher selection - 5%; Inservice training - 2%; Consultation - 2%; Public Relations - 2%; Research - 2%.

Leaske and Austin in a 1963 unpublished study reviewed 117 returned questionnaires (56.6% of 207) from school diagnosticians. Age, sex, job title, district size by membership, types of mentally handicapped programs served, number of diagnosticians in the system,

administrative data, salary, work load, time spent in different tasks, and types of tests used. As in the previous research cited, the interest was focused more on general and demographic information rather than on function. It did suggest that school diagnosticians spent their time in the following ways: Individual assessment, group testing, reports and records, consultation, individual counseling, research, and travel. Individual assessment took the majority of time.

The James A. Dunn study of school diagnosticians (1964) was basically demographic in nature. Age, sex, degrees, title, size of school district, and salary were studied. This study also sought to determine the university attended by the school diagnostician and the degree of satisfaction with training. However, it did not address itself directly to the functions of the school diagnostician.

An interesting study was completed by Swanson in 1966. He sent two questionnaires to each of 58 intermediate superintendents and 98 school district superintendents. The additional questionnaire was to be completed by an elementary principal. A total of 165 completed the questionnaire; this included 112 superintendents and 53 elementary principals. The study pointed out the need to expand psychological services. It also indicated that the diagnostician should assume a broader role in the schools and function competently in working with all school children.

Lesiak's study (1971) entitled "Michigan School Psychologists: 1960-1970" is probably the most comprehensive study to date. A total of 210 school psychologists responded to a 22 item questionnaire which attempted to explore the background, professional practices and



procedures for providing service, and professional concerns regarding university training, role and function and general issues. Role and function was only one small part of this study, but it was more complete and descriptive than the previous studies. However, it only listed functions in terms of time spent rather than the relative importance of the functions. The percentage figures for each activity below indicate the percentage of the school psychologists who spent the major portion of working time in that activity.

Current time spent:

Individual assessment	86%
Preparation of written reports	68%
Conferences	35%
Planning educational programs	24%

Ideal time spent:

Individual assessment	53%
Planning educational programs	51%
Conferences	48%
General consultation	37%

Lesiak also found that school psychologists preferred to do more in-service education, general consultation, program evaluation, and planning of educational programs for children while doing less in the way of writing reports. The three most desired additional skills were <sup>by the Michigan Association of School Psychologists regarding inservice</sup> diagnosis of learning disabilities, remediation of learning disabilities, and behavior modification techniques. The most frequently cited professional concerns were a desire to provide psychological <sup>cited professional concerns were a desire to provide psychological</sup> services to all children and the need for a strong professional organization in the state.

In a recent survey of 206 school psychologists (1972) completed by the Michigan Association of School Psychologists regarding inservice

needs, the following topics of interest were of concern to them.

1. The use of the school psychologist as a behavioral consultant
2. A diagnostic-prescriptive approach to pre-school education
3. Alternative approaches to standardized testing: behavioral description and developmental learning
4. Legal: new rules and regulations, liability, and due process
5. Training: goals, requirements, competency based programs. It was interesting to note that 24% of the respondents were concerned with "Role definition - What is a school psychologist?"
6. Accountability

Although this study was concerned with inservice needs and not directly with the functions of the school psychologist, it pointed out that the school psychologists had questions concerning what their role was. It also pointed out their interest in the functions of behavioral consultation and diagnosis-prescription.

Up to this time in the history of school psychology in Michigan there were no studies devoted exclusively to the role of the school psychologist and what his activities and functions should be. Most of the studies in Michigan have been demographic in orientation or general in interest. Of the six studies cited, two did not deal at all with the functions and activities of the school psychologists; one dealt briefly concerning the general expansion of the services of school psychologists; two contained a question or two concerning how school

psychologists spent their time; one contained questions concerning how school psychologists spent their time, what is the "ideal" majority of time spent, and what additional skills were needed. In general, these studies did not provide much insight into the role of the school psychologist in Michigan. The activities which were discussed in these studies were for the most part general rather than specific. In most cases the activities were discussed from the perspective of "time spent" rather than the perspective of its importance to the role of the school psychologist.

#### Summary of Relevant Literature

The role of the school psychologist in the United States has experienced a brief but stormy history. The rapid increase in the number of school psychologists since the Second World War has focused attention on the problems of what a school psychologist is and what activities he should engage in. Within the last ten years there has been considerable discussion of changing the orientation of school psychologists from a clinical-diagnostic model to a behavioristic, practical, and applied model. Although many writers have suggested various changes in the activities of the school psychologist, little research has actually been carried out to study these various activities and their relative importance to the role of the school psychologist. The research in Michigan has generally been demographic, descriptive, and more concerned about salaries, training procedures, and the size of school districts served by the school psychologist rather than upon the actual activities of the school psychologist.

Also, most of the research to date has described the role as is rather than as it should be.

## CHAPTER III

### METHODOLOGY

#### Introduction

This chapter focuses upon the methodology used to obtain the data. Included are sections dealing with definition of terms, the population sampled, the development of the questionnaire, hypotheses and specific questions, statistical analysis, and the collection of the data.

It is important, first of all, to provide a definition for each of the terms used in the study.

#### Definition of Terms

##### Ideal Role

Ideal role refers to a set of major and specific activities of the school psychologist as perceived with varying degrees of importance by school psychologists and directors of special education in Michigan. It is a role which is perceived by the respondents as they wish it to be, not in the perfect sense, but rather as they prefer it; it is a perceived preferable role.

##### Specific Activities

Specific activities refer to fifty-five particular functions which may be performed by the school psychologist in the ideal role. A list of these activities is provided in Appendix A. These activities

are subsumed under the eight major activities described below.

### Major Activities

Major activities refer to eight general functions which may be performed by the school psychologist in the ideal role. Selected combinations of the fifty-five specific activities define these major activities. They include the following:

1. Diagnostic Testing and Evaluation.--The school psychologist makes a diagnostic study of a child by means of various measurement instruments or techniques to determine the reason for the child's difficulties in school. There are ten specific activities within this major activity.

2. Teacher Consultation and Psycho-Educational Planning for Individual Children.-- The school psychologist consults with teachers and school personnel in planning a child's school program which is unique and specific to that individual and which is based upon sound psychological and educational principles. There are six specific activities within this major activity.

3. Psychotherapy and/or Counseling with Children.--The school psychologist gives direct supportive help to the child in an attempt to improve or change the child's behavior so he can adapt himself more readily to a school learning environment. There are four specific activities within this major activity.

4. Parent Consultation.--The school psychologist helps the parents understand the psychological and educational needs of their children. There are four specific activities within this major activity.

5. Community Relationships.--The school psychologist works within the community in an educational and informative manner and provides a liaison between the school and the community regarding programs for handicapped children. There are nine specific activities within this major activity.

6. School Curriculum and Program Consultation.--The school psychologist provides recommendations and information regarding special needs, curriculum, and programming in the school district in order to improve the quality of the educational program and bring about educational change. There are twelve specific activities within this major activity.

7. Administration of Special Education Programs.--The school psychologist coordinates special education programs, supervises personnel, and makes special arrangements such as transportation and scheduling. There are six specific activities within this major activity.

8. Research.--The school psychologist by means of various techniques seeks to gather information, answer questions, or solve problems which confront education as it attempts to meet the psychological and educational needs of children in a school setting. There are four specific activities within this major activity.

Population

The population from which the data was derived for this study included the total number of school psychologists and directors of special education in the State of Michigan who met the following criteria:

1. Directors of special education

This title refers to all those who are employed as directors of special education in the State of Michigan and approved as such by the Michigan Department of Education and those who perform the duties of a director of special education but who may not be approved by the Michigan Department of Education.

2. School psychologists

This title refers to all those who have met the Michigan Department of Education's criteria for approval (either temporary or permanent) as a school diagnostician and are employed in that capacity. (Note: The term school diagnostician is used here because Michigan Public Law 353, which effectively changed the title to school psychologist, had not yet gone into effect at the time the study was conducted.)

There were 140 directors of special education and 400 school psychologists in the State of Michigan who met the above criteria for a total population of 558.



### Development of the Questionnaire

In order to determine how the school psychologists and directors of special education perceived the ideal role of the school psychologist in Michigan it was considered expedient to compile a list of activities which could then be evaluated by the respondents and rated and ranked according to relative importance. These activities included the fifty-five specific activities and eight major activities defined previously.

The initial step in the construction of the questionnaire was a careful examination and analysis of the relevant literature which detailed the many varied activities of the school psychologist and the many important issues which confronted him. The activities were organized into eight meaningful combinations which have been defined as the eight major activities.

Although the questionnaire centered around the activities of school psychologists, it was also considered important to obtain the perceptions of the respondents regarding the types of disabilities which should receive services from school psychologists, the appropriate settings in which they should work, some of their professional needs, and in what areas they needed to improve their competencies.

A preliminary questionnaire was submitted to the members of the writer's guidance committee and the research consultants from the Office of Research Consultation in the College of Education at Michigan State University for their suggestions, and a revision was written.

A pilot study of this revised questionnaire was conducted, utilizing a selected group of school psychologists, directors of special

education, trainers of school psychologists, professional colleagues at Michigan State University, and consultants from the Michigan State Department of Education - Special Education Services. The purpose of this pilot study was to further refine the questionnaire, revise content, and discover instances of misunderstanding, poor wording, inconvenient spacing, and awkward format. A total of 29 pilot questionnaires were distributed and a total of 20 were returned. As a result of this pilot study, the length of the questionnaire was shortened, some content was changed, and changes in wording and format were made.

A list of the names and addresses of school psychologists and directors of special education was obtained from the Michigan Department of Education - Special Education Services. This list included all those who met the criteria as outlined previously.

#### The Questionnaire

The questionnaire in its final form was divided into nine parts (see Appendix P).

1. General Information Page.--The purpose of the general information page was to obtain data regarding age, sex, type of district in which employed, number of years of experience as a school psychologist or director of special education, amount of teaching experience, highest degree obtained, approval and certification information, and type of university training. A different general information page was

designed for each group. The information obtained from this page was used as identifying data. Some of the information - type and size of district, amount of professional experience as either a school psychologist or director of special education, amount of teaching experience - was used as independent variables in the statistical analysis of role perception.

2. Activities of the School Psychologist.--This section consisted of the fifty-five specific activities which may be performed by school psychologists (see Appendix A). To avoid a response set in which the respondents may select answers on the basis of major activity grouping, these activities were intentionally scrambled by placing them in a hat and selecting them one at a time to provide a random order in the questionnaire. The respondents checked each of the activities according to the following relative importance scale, and they were scored according to the number in parenthesis.

A. Must Perform (Score: 5)

The school psychologist MUST perform this activity. It is a major and essential function of the highest priority.

B. Should Perform (Score: 4)

The school psychologist SHOULD perform this activity. It is a meaningful, significant, and desirable function of medium priority.

C. May Perform (Score: 3)

The school psychologist MAY perform this activity if he wishes. It is a minor function of low priority but it is permissible and acceptable.

D. Should Not Perform (Score: 2)

The school psychologist SHOULD NOT perform this activity. It is not a desirable or meaningful function for the school psychologist.

E. Must Not Perform (Score: 1)

The school psychologist MUST NOT perform this activity. It is not an essential or legitimate function for the school psychologist.

The purpose of this part of the questionnaire was to determine the relative importance of performing each of the activities of the school psychologist in the ideal role as perceived by the respondents. A score from one to five was given for each response with a "Must" receiving a five and a "Must Not" receiving a one. Total scores for each major activity were obtained.

3. Relative Importance of Activities.--The respondents were asked to rank their perceptions of the eight major activities as to their relative importance to the school psychologist in the present role (as it is now) and in the ideal role as previously defined. This was the only item in the questionnaire which included the present role. The purpose of including it was to provide a means of comparing the present role with the ideal role according to the perceived importance of the eight major activities.

4. Relative Time Allotment of Activities.--The respondents were asked to specify the percentage of professional time which they perceived as necessary for the school psychologist in the ideal role to

spend in each of the eight major activities.

5. Adequacy of Preparation for Activities.--The respondents were asked to rank their perceptions of the school psychologists' relative degree of preparation in each of the eight major activities.

6. Children Receiving Professional Psychological Services from the School Psychologist.--The respondents were asked to indicate to what extent nine types of children including normal children and children with various types of handicaps should receive professional services from the school psychologist in the ideal role. The following code was used: 1 - Must receive service; 2 - Should receive service; 3 - May receive service; 4 - Should Not receive service; 5 - Must Not receive service.

7. Settings for School Psychological Activities.--The respondents were asked to answer three questions relating to the setting or environmental conditions surrounding the performance of the various activities of the school psychologist in the ideal role.

A. What should be the size of the student population which the school psychologist should service? The respondents were asked to check one of five categories ranging from 2000 to 5000.

B. What programs should be served? Seven programs were listed and the respondents were asked to check each one according to the following code: 1 - Must Serve; 2 - Should Serve; 3 - May Serve; 4 - Should Not Serve; 5 - Must Not Serve.

C. To whom should school psychologists be most immediately responsible? Five professional personnel were listed and the respondents were asked to check one.

8. Professional Needs of the School Psychologist.--The respondents were asked to answer nine questions dealing with various professional needs of the school psychologist in the ideal role. Years of required teaching experience, certification requirements, the degree necessary, use of paraprofessionals, professional affiliations, freedom to engage in "private practice," and how to improve professionally were the questions which were asked. The question concerning professional affiliations was structured by listing eight professional organizations and requesting the respondents to check each one according to the following code: 1 - Must Belong; 2 - Should Belong; 3 - May Belong; 4 - Should Not Belong; 5 - Must Not Belong. The question concerning professional improvement was structured by listing four activities and requesting the respondents to check each one according to the following code: 1 - Must Do; 2 - Should Do; 3 - May Do; 4 - Should Not Do; 5 - Must Not Do.

9. Improvement of Competencies.--This was the only open-ended question in the questionnaire. The respondents were asked to list the specific professional areas in which they perceived the school psychologists needed to improve or upgrade their skills and competencies.

### Collection of Data

A mailing was sent to the 558 people in the population of interest on February 13, 1973. Enclosed was a letter of explanation, one questionnaire, and a stamped, addressed envelope for the return of the questionnaire (see Appendices B and C). A follow-up letter was mailed on February 28, 1973, for the purpose of contacting the non-respondents and increasing the rate of return (see Appendix D).

A total of 417 questionnaires or 75% were returned by school psychologists and directors of special education. School psychologists returned 318 questionnaires (78%) while directors of special education returned 99 (66%). Two of the questionnaires could not be used in the statistical analysis because of errors in completion. Two questionnaires were returned to the sender because of a faulty address. Three questionnaires were completed but were not included in the above count: two were received too late for consideration and one failed to specify whether it had been completed by a school psychologist or director of special education.


### Hypotheses and Specific Questions

#### Hypotheses

- Hypothesis I: There is an interaction between the amount of teaching experience and group membership (school psychologists or directors of special education) on the perception of the ideal role of the school psychologist on each of the eight major activities.
- Hypothesis II: There is an interaction between amount of professional experience as either a school psychologist or director of special education and group membership on the perception of the ideal role of the school psychologist on each of the eight major activities.

Hypothesis III: There is an interaction between type and size of school district in which the school psychologist and director of special education are employed and group membership on the perception of the ideal role of the school psychologist on each of the eight major activities.

### Specific Questions

1. What is the relative importance of the eight major activities of the school psychologist in the present role and in the ideal role as ranked by school psychologists and directors of special education, and what is the extent of agreement between the two groups.
  2. What should be the relative time allotment (percentage of time to spend) of the eight major activities of the school psychologist in the ideal role as perceived by school psychologists and directors of special education, and what is the extent of agreement between the two groups?
  3. How prepared is the school psychologist to perform the eight major activities in the ideal role as ranked by school psychologists and directors of special education, and what is the extent of agreement between the two groups?
  4. What is the extent of agreement within each group between the rankings of the eight major activities in the present role, ideal role, adequacy of preparation, and amount of time to spend?
  5. What children should receive professional psychological
- 



services from the school psychologist in the ideal role as perceived by school psychologists and directors of special education?

6. In what settings or under what environmental conditions should the school psychologist perform professional services as perceived by school psychologists and directors of special education?
7. What are the professional needs which help school psychologists become approved and certified, keep informed, and meet the continuing demands of their role in the schools as perceived by school psychologists and directors of special education?
8. In what professional areas do the school psychologists need to improve their skills and competencies as perceived by both school psychologists and directors of special education?

#### Statistical Analysis

To test the three hypotheses the univariate analysis of variance was used to test each of the eight dependent variables (Finn, 1968).

Kirk (1968, p. 198) discusses the use of a statistical measure called the Estimate of the Strength of Association. It enables one to find out what proportion of the variance in the dependent variable is accounted for by a specific source of variation. It must be emphasized that, if the sample size is sufficiently large as is the case with this present study, a trivial association between an independent variable and a dependent variable may achieve statistical significance. The use of

this statistic in this study was helpful in determining if there was a meaningful difference or not.

To test the distributional agreement of school psychologists and directors of special education on each of the fifty-five specific activities, the chi-square test of homogeneity was used (Conover, 1971, p. 150).

Kendall's Coefficient of Concordance (Conover, 1971, p. 270) was used to measure the extent of agreement within each group between present role, ideal role, adequacy of preparation, and time to spend in each of the eight major activities. Kendall's Coefficient of Concordance was also used to look at the extent of agreement between the school psychologists and directors of special education for the present role, ideal role, adequacy of preparation, and time to spend in each of the eight major activities.

In order to determine the internal consistency of the items within each of the eight major activities, Hoyt's (1941) Internal Consistency Coefficient was calculated. This coefficient looks at the extent to which the items measure the same variable - the major activity. It is in essence a reliability index based on the analysis of variance theory. "The coefficient of reliability of a test gives the percentage of the obtained variance in the distribution of test scores that may be regarded as true variance, that is, as variance not due to the unreliability of the measuring instrument" (Hoyt, 1941, p. 153).

For the remainder of the data, summation and percentage statistics were used.

The statistical programs were run on the digital computer at the Michigan State University Computer Center using both the CDC 6500 and the CDC 3600.

## CHAPTER IV

### ANALYSIS OF RESULTS

#### Introduction

This chapter focuses upon the results of the questionnaire and the statistical analyses which were used to study the data. The first section of the chapter is concerned with general information which describes and compares the school psychologists and directors of special education according to age, sex, type and size of school district, amount of experience, and certification. The second section deals with the testing of the three null hypotheses in an attempt to discover if amount of teaching experience, amount of professional experience as a school psychologist or director of special education, and type and size of school district have any effect upon role perception as defined by the eight major activities. The testing of these hypotheses will also determine if there are any statistically significant differences between school psychologists and directors of special education concerning their perceptions of the eight major activities in the ideal role of the school psychologist. The perceived relative importance of the fifty-five specific activities and the statistically significant differences between the respondent groups on these activities are detailed in the third section of this chapter. The fourth section deals with the rankings of the eight major activities according to perceived present role, ideal role, adequacy of preparation, and

time to spend in the performance of the eight major activities. An explanation of which children should receive psychological services from the school psychologist in the ideal role is given in section five of this chapter. The sixth section discusses the settings for school psychological activities as perceived by the respondents. The seventh section details the perceived professional needs of school psychologists in Michigan. The final section describes the professional areas in which school psychologists need to improve skills and competencies.

### General Information

The total number of respondents to the general information items of the questionnaire included 317 school psychologists and 97 directors of special education. Because of various omissions of information by the respondents, the number of respondents within each table may differ.

#### Age

In general the school psychologists as a group were younger than the directors of special education (see Table 1). A total of 58.6% of the school psychologists were below the age of 39 whereas only 41.5% of the directors of special education were below this age. A total of 56.4% of the directors of special education were between 40 and 59 years of age whereas only 39.4% of the psychologists were within this age group.

#### Sex

As shown in Table 2 the school psychologists as a group had a slightly higher percentage of males (56%) to females (44%) whereas the large majority of the directors of special education were males (83.5%).

TABLE 1.--Age of Respondents.

Group	Less than 30		30-39		40-49		50-59		60+	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 307)	20.5	(63)	38.1	(117)	28.6	(88)	10.8	(33)	2	(6)
Directors (N = 94)	5.3	(5)	36.2	(34)	36.2	(34)	20.2	(19)	2.1	(2)

TABLE 2.--Sex of Respondents.

Group	Male		Female	
	%	(N)	%	(N)
Psychologists (N = 316)	56	(178)	44	(138)
Directors (N = 97)	83.5	(81)	16.5	(16)

Type of District in Which Employed

As shown in Table 3 the majority of school psychologists (62.7%) and directors of special education (53%) were employed in local school districts. A total of 35.7% of the school psychologists and 45% of the directors of special education were employed in intermediate school districts.

Public School Student Population  
in the Employing District

As shown in Table 4 approximately a third of the school psychologists worked in each of three district sizes with student populations

of 0-9999 (33.1%), 10,000-24,999 (37.3%), and 25,000+ (29.6%). A total of 42.7% of the directors of special education worked in a district size of 0-9999, 38.5% worked in a district size of 10,000-24,999, and 18.8% worked in a district size of 25,000 or more.

TABLE 3.--Type of District in Which the Respondents were Employed.

Group	Local		Intermediate		Other*	
	%	(N)	%	(N)	%	(N)
Psychologists (N = 314)	62.7	(197)	35.7	(112)	1.6	(5)
Directors (N = 96)	53	(51)	45	(43)	2	(2)

\* "Other" refers to those employed in specific schools or psycho-diagnostic clinics.

TABLE 4.--The Size of the Public School Student Population in the School Districts of the Respondents.

Group	0-9999		10,000-24,999		25,000+	
	%	(N)	%	(N)	%	(N)
Psychologists (N = 311)	33.1	(103)	37.3	(116)	29.6	(92)
Directors (N = 96)	42.7	(41)	38.5	(37)	18.8	(18)

Years of Professional Experience  
as a School Psychologist or  
Director of Special Education

It is evident that school psychologists as a group had less experience in their positions than did the directors of special education

in their positions (see Table 5). A total of 46.6% or almost half of the school psychologists had 1-4 years of experience as a school psychologist. A total of 38.3% of the directors of special education had 1-4 years of experience, 41.5% had 5-9 years of experience, and 19.2% had 10+ years of experience.

TABLE 5.--Years of Professional Experience as a School Psychologist or Director of Special Education.

Group	0		1-4		5-9		10+	
	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 313)	.6	(2)	46.6	(146)	35.2	(110)	17.6	(55)
Directors (N = 94)	1	(1)	38.3	(36)	41.5	(39)	19.2	(18)

#### Highest Degree Earned

Two-thirds of the school psychologists (66%) and two-thirds (67.5%) of the directors of special education earned their M.A. or M.S. degree as their highest degree (see Table 6). A total of 20% of the school psychologists and 18% of the directors of special education attained the Educational Specialist degree. A total of 13% of the school psychologists and 13.5% of the directors attained either the Ed.D or Ph.D. Approximately one-third of each group had degrees above the M.A. or M.S. level whereas only 1% of both groups had less than an M.A. or M.S. degree.



TABLE 6.--Highest Degree Earned by the Respondents.

Group	BS or BA		MS or MA		Ed.S		Ed.D		Ph.D	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 315)	1	(4)	66	(208)	20	(62)	5	(16)	8	(25)
Directors (N = 96)	1	(1)	67.5	(65)	18	(17)	6.2	(6)	7.3	(7)

Type of Approval as a School  
Diagnostician or Director  
of Special Education

The majority of school psychologists (85%) had permanent approval as a school diagnostician in Michigan, and 15% had temporary approval (see Table 7). A majority of the directors of special education (62%) had permanent approval in Michigan. A total of 14% had temporary approval, 17% received "grandfather" approval, and 7% were not approved.

TABLE 7.--Type of Approval as a School Diagnostician or Director of Special Education.

Group	Temporary		Permanent		Grandfather*		Not Approved*	
	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 316)	15	(47)	85	(269)	X	X	X	X
Directors (N = 96)	14	(13)	62	(60)	17	(16)	7	(7)

\* Does not apply to School Psychologists

### Type of Teacher Certification

In order to be approved as a school psychologist in Michigan it is not essential to have a teacher certificate, while it is necessary for the directors of special education. A total of 31% of the school psychologists in Michigan did not have a teacher certificate (see Table 8). The majority of both school psychologists (54%) and directors of special education (89.4%) had permanent teacher certificates.

TABLE 8.--Type of Teacher Certification of the Respondents.

Group	Provisional		Permanent		Life		Not Certified	
	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 311)	11	(34)	54	(168)	4	(13)	31	(96)
Directors (N = 94)	3.2	(3)	89.4	(84)	5.3	(5)	2.1	(2)

### Level of Teacher Certification

As shown in Table 9, 21.7% of the school psychologists had elementary certification, 31.7% had secondary certification, and 14% had both elementary and secondary certification. A total of 22% of the directors had elementary certification, 31% had secondary certification, and 45% had both elementary and secondary certification.

### Professional Approval in Other Areas of Special Education

As shown in Table 10, 81.5% of the school psychologists did not have approval in any other area of special education. A total of 87% of the directors of special education, on the other hand, had approval

in at least one other area of special education with 27% having approval in more than one special education area. It can be concluded that directors of special education as a group had a much stronger background in special education than did the school psychologists.

TABLE 9.--Level of Teacher Certification of the Respondents.

Group	Elementary		Secondary		Both Elementary and Secondary		None of Above	
	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 300)	21.7	(65)	31.7	(95)	14	(42)	32.6	(98)
Directors (N = 91)	22	(20)	31	(28)	45	(41)	2	(2)

TABLE 10.--Professional Approval of the Respondents in Other Special Education Areas.

Group	No Approval		Mental Retardation		Speech Correction		Other Special Education Areas		More than one other Special Education area	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 317)	81.5	(257)	8	(26)	3	(9)	4	(14)	3.5	(11)
Directors (N = 97)	13	(13)	27	(26)	16.5	(16)	16.5	(16)	27	(26)

### Years of Teaching Experience

As shown in Table 11, 29.1% of the school psychologists did not have any teaching experience. Only 14.5% of the school psychologists had more than 10 or more years of teaching experience. The directors of special education, on the other hand, had considerably more teaching experience than did the school psychologists. Only 3.2% of the directors had no teaching experience, and slightly more than half or 51.1% had 10 or more years of teaching experience.

TABLE 11.--Years of Teaching Experience of the Respondents.

Group	0		1-4		5-9		10+	
	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 305)	29.1	(89)	33.1	(101)	23.3	(71)	14.5	(44)
Directors (N = 94)	3.2	(3)	10.6	(10)	35.1	(33)	51.1	(48)

### Employment of Directors of Special Education as School Diagnosticians or School Psychologists (Respondents: special education directors only)

A total of 21 out of 96 directors or 22% have had employment experience as school diagnosticians or school psychologists.

### Levels of Certification for School Psychologists according to the Psychologist Registration Act (Respondents: school psychologists only)

A total of 10 out of 290 (3.5%) were certified at the consulting psychologist level. A total of 35 (12%) were certified at the

psychologist level. A plurality of the school psychologists (N = 141 or 48.5%) were certified at the psychological examiner level. A total of 104 or 36% were not certified at any level. (It should be noted that it is not necessary to be certified at any level unless a particular school psychologist decides to engage in private practice.)

Personnel to whom School Psychologists  
were Immediately Responsible (respondents:

school psychologists only)

The majority of the school psychologists (58%) were immediately responsible to a Director of Special Education (see Table 12).

TABLE 12.--Personnel to whom School Psychologists were Immediately Responsible.

Group	%	(N)
Director of Pupil Personnel	10	(30)
Director of Special Education	58	(183)
Superintendent	7	(22)
Director or Coordinator of Psychological Services	15	(48)
Other	10	(31)

N (School Psychologists) = 315

Universities Attended by School  
Psychologists (respondents:

school psychologists only)

As shown in Table 13, Michigan State University (23.8%) and Wayne State University (23%) have trained most of the school psychologists in the state of Michigan. Western Michigan University trained 17.4%; University of Michigan trained 15.5%; Central Michigan University trained 8%; other U.S. colleges trained 12.8%.

TABLE 13.--Universities Which have Trained School Psychologists.

Group	%	(N)
Michigan State University	23.3	(72)
Wayne State University	23	(70)
Western Michigan University	17.4	(54)
University of Michigan	15.5	(48)
Central Michigan University	8	(25)
Other U.S. college or university	12.8	(40)

N (School Psychologists) = 309

University Departments Which have  
Trained School Psychologists

(Respondents: school psychologists only)

The plurality of the school psychologists (37%) were trained in psychology departments at the various universities (see Table 14). Education departments accounted for the training of 28% of the school psychologists. A total of 14.6% were trained in joint programs combining both the education and the psychology departments. A total of 15.4% of the school psychologists answered this question by describing the department as educational psychology; since it was not known whether this was a program located in an education or psychology department, this was retained as a separate category.

Testing of Hypotheses

Before the null hypotheses were tested, Hoyt's Internal Consistency Coefficient was calculated for each of the eight major activities to determine the extent to which each of the items which comprised a major activity were measuring the same thing, that is, the extent to which the items were unidimensional (see Table 15). These

TABLE 14.--University Departments Which have Trained School Psychologists.

Group	%	(N)
Psychology	37	(105)
Education	28	(78)
Educational Psychology	15.4	(43)
Education and Psychology	14.6	(41)
Other	5	(14)

N (School Psychologists) = 281

TABLE 15.--Hoyt's Internal Consistency Measure for Eight Major Activities (N = 414).

Activity	Internal Consistency
Diagnosis	.71
Psycho-Educational Planning	.59
Child Therapy	.64
Parent Consultation	.32
Community Relationships	.76
School Program Consultation	.83
Administration of Special Education Programs	.71
Research	.74

coefficients were relatively high except for Psycho-Educational Planning (.59) and Parent Consultation (.32). Because of these smaller coefficients, it became more difficult to find significant differences in the analysis of variance.

As shown in Table 16, the correlations between the eight major activities of the school psychologists were generally low which indicates that responses to each of the eight major activities were relatively independent. All of the 28 correlations fell below .50

TABLE 16.--Intercorrelations Among the Eight Major Activities (N = 382).

	Diagnosis	Psycho-Educational Planning	Child Therapy	Parent Counseling	Community Relationships	Program Consultation	Administration of Special Education	Research
Diagnosis	1.00							
Psycho-Educational Planning	.51	1.00						
Child Therapy	.23	.16	1.00					
Parent Counseling	.34	.23	.16	1.00				
Community Relationships	.24	.21	.41	.36	1.00			
Program Consultation	.27	.33	.45	.39	.63	1.00		
Administration of Special Education	.14	.11	.10	.20	.44	.54	1.00	
Research	.13	.15	.22	.17	.32	.41	.30	1.00



except the correlation between Diagnosis and Psycho-Educational Planning (.51), the correlation between School Program Consultation and Community Relationships (.63), and the correlation between School Consultation and Administration of Special Education Programs (.54).

For each hypothesis test the number of subjects which were included in the statistical design varied somewhat due in most cases to missing data. For each hypothesis test a percentage statistic--the Estimate of the Strength of Association (Kirk, 1968, p. 198)--was used in order to determine the proportion of the total variance of the dependent measure accounted for by each significant effect. The decision rule in all statistical tests was to reject the null hypothesis at the .05 level. (The asterisks in each table indicate significance at the .05 level for that particular effect.)

#### Null Hypothesis I

There is no interaction between the amount of teaching experience and group membership (school psychologists or directors of special education) on the perception of the ideal role of the school psychologist on each of the eight major activities.

The designs used to test this hypothesis were two-way fixed effects Analyses of Variance, one for each of the eight dependent variables. The group independent variable ( $N = 384$ ) had two levels: school psychologists ( $N = 295$ ) and directors of special education ( $N = 89$ ). The teaching experience independent variable had four levels: 0 years, 1-4 years, 5-9 years, and 10+ years. This was an unbalanced design in which there was an unequal number of subjects per cell. Because of this unbalanced design it was not possible to test each source of variation independently. Table 17 indicates the means and

TABLE 17.--Means of the Eight Major Activities of the School Psychologist for Teaching Experience  
x Group (N = 384).

Group	Years of Teaching Experience	Number of Subjects per Cell	Means of the Eight Activities							
			Diagnosis	Psycho-Educational Planning	Child Therapy	Parent Counseling	Community Relations	School Program Consultation	Administration of Special Education	Research
School Psychologists	0	87	44.17	26.25	11.37	14.64	30.37	42.22	16.55	12.85
	1-4	96	44.89	26.46	11.41	15.09	30.90	42.27	16.32	13.16
	5-9	69	44.96	26.43	11.09	15.16	30.61	42.42	16.90	13.46
	10+	43	44.26	26.74	11.44	15.00	30.51	41.47	15.58	13.26
Directors of Special Education	0	3	44.67	26.00	11.67	15.67	33.67	42.33	16.67	13.33
	1-4	9	41.89	24.44	9.67	14.78	28.33	35.89	14.22	12.78
	5-9	31	43.16	25.42	10.00	15.81	29.74	38.13	14.06	12.68
	10+	46	43.00	25.67	10.39	15.02	29.74	39.33	14.50	13.20
	Pooled Standard Deviation		3.70	2.40	2.15	1.84	3.61	5.36	3.04	2.10

pooled standard deviations on the eight dependent measures and the number of subjects per cell in the design.

Diagnosis.--As shown in Table 18, there was no significant interaction effect between amount of teaching experience and group membership on the variable of Diagnosis. Also, the amount of teaching experience had no significant effect upon the perception of the importance of Diagnosis in the ideal role of the school psychologist. There was a significant group main effect. A comparison of the weighted means for the two groups indicated that in the ideal role of the school psychologist, Diagnosis was perceived as slightly more important by the school psychologists (mean = 44.6) than by the directors of special education (mean = 43.0). The proportion of the total variance of the dependent measure accounted for by this group effect was 3.0% suggesting that the relationship between the dependent variable and group was small.

TABLE 18.--Two-way Fixed Effects ANOVA on Teaching Experience and Group Membership--Dependent Measure: Diagnosis.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	175.03	12.77	.0004*
Teaching experience	3	8.57	.63	.5993
Interaction	3	10.72	.78	.5047
Error	376	13.70		

Psycho-Educational Planning.--As shown in Table 19, there was no significant interaction effect between amount of teaching experience and group membership on the variable of Psycho-Educational Planning. Also, the amount of teaching experience had no significant effect upon the perception of the importance of Psycho-Educational Planning in the ideal role of the school psychologist. There was a significant group effect. A comparison of the weighted means for the two groups indicated that in the ideal role of the school psychologist, Psycho-Educational Planning was perceived as slightly more important by the school psychologists (mean = 26.4) than by the directors of special education (mean = 25.5). The proportion of the total variance of the dependent measure accounted for by this group effect was 2.6% suggesting that the association between the dependent variable and group was relatively small.

TABLE 19.--Two-way Fixed Effects ANOVA on Teaching Experience and Group Membership--Dependent measure: Psycho-Educational Planning.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	63.27	10.97	.0011*
Teaching Experience	3	3.45	.60	.6169
Interaction	3	3.00	.52	.6687
Error	376	5.77		

Child Therapy.--As shown in Table 20, there was no significant interaction effect between amount of teaching experience and group membership on the variable of Child Therapy. Also, the amount of teaching experience had no significant effect upon the perception of the importance of Child Therapy in the ideal school psychologist role.

There was a significant group effect. A comparison of the weighted means for the two groups indicated that in the ideal role of the school psychologist, Child Therapy was perceived as slightly more important by the school psychologists (mean = 11.3) than by the directors of special education (mean = 10.2). The proportion of the total variance of the dependent measure accounted for by this group effect was 4.3%, suggesting a small relationship between the dependent variable and group.

TABLE 20.--Two-way Fixed Effects ANOVA on Teaching Experience and Group Membership--Dependent Measure: Child Therapy.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	82.83	17.99	.0001*
Teaching Experience	3	2.69	.58	.6255
Interaction	3	3.03	.66	.5780
Error	376	4.60		

Parent Counseling.--As shown in Table 21, there was no significant interaction effect present between amount of teaching experience and group membership on the dependent variable of Parent Counseling. Also, the amount of teaching experience had no significant effect upon the perception of the importance of Parent Counseling in the ideal school psychologist role. There was no significant difference between the perceptions of school psychologists and directors of special education on the variable of Parent Counseling.

TABLE 21.--Two-way Fixed Effects ANOVA on Teaching Experience and Group Membership--Dependent Measure: Parent Counseling.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	7.42	2.20	.1388
Teaching experience	3	6.24	1.85	.1375
Interaction	3	2.96	.88	.4525
Error	376	3.37		

Community Relationships.--As shown in Table 22, there was no significant interaction effect between amount of teaching experience and group membership on the variable of Community Relationships. Amount of teaching experience had no significant effect upon the perception of the importance of Community Relationships in the ideal school psychologist role. There was a significant group effect. A comparison of the weighted means for the two groups indicated that in the ideal role of the school psychologist, Community Relationships was perceived as slightly more important by the school psychologists (mean = 30.6) than by the directors of special education (mean = 29.7). The proportion of the total variance of the dependent measure accounted for by this group

TABLE 22.--Two-way Fixed Effects ANOVA on Teaching Experience and Group Membership--Dependent Measure: Community Relationships.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	53.75	4.12	.0432*
Teaching Experience	3	1.07	.08	.9696
Interaction	3	24.73	1.90	.1300
Error	376	13.05		

effect was .8% which suggests that the relationship between the dependent variable and group was very small.

Program Consultation.--As shown in Table 23, there was no significant interaction effect between amount of teaching experience and group membership on the variable of Program Consultation. Also, the amount of teaching experience had no significant effect upon the perception of the importance of Program Consultation in the ideal school psychologist role. There was a significant group effect. A comparison of the weighted means indicated that in the ideal role of the school psychologist, Program Consultation was perceived as slightly more important by the school psychologists (mean = 42.2) than by the directors of special education (mean = 38.7). The proportion of the total variance of the dependent measure accounted for by this group effect was 6.9%, suggesting a small relationship between the dependent variable and group.

TABLE 23.--Two-way Fixed Effects ANOVA on Teaching Experience and Group Membership--Dependent Measure: Program Consultation.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	842.34	29.30	.0001*
Teaching experience	3	1.60	.06	.9827
Interaction	3	53.60	1.86	.1351
Error	376	28.75		

Administration of Special Education.--As shown in Table 24, there was no significant interaction effect between amount of teaching experience and group membership on the variable of Administration of Special Education. Also, the amount of teaching experience had no significant effect upon the perception of the importance of Administration of Special Education in the ideal school psychologist role. There was a significant group effect. A comparison of the weighted means indicated that in the ideal role of the school psychologist, Administration of Special Education was perceived as slightly more important by the school psychologists (mean = 16.4) than by the directors of special education (mean = 14.4). The proportion of the total variance of the dependent measure accounted for by this group effect was 7.1%, suggesting only a small association between the dependent variable and group.

TABLE 24.--Two-way Fixed Effects ANOVA on Teaching Experience and Group Membership--Dependent Measure: Administration of Special Education.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	280.01	40.35	.0001*
Teaching experience	3	7.51	.81	.4865
Interaction	3	15.18	1.65	.1784
Error	376	9.23		

Research.--As shown in Table 25, there was no significant interaction effect present between amount of teaching experience and group membership on the dependent variable of Research. Also, the amount of teaching experience had no significant effect upon the



perception of the importance of Research in the ideal school psychologist role. There was no significant difference between the perceptions of school psychologists and directors of special education on the variable of Research.

TABLE 25.--Two-way Fixed Effects ANOVA on Teaching Experience and Group Membership--Dependent Measure: Research.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	2.09	.48	.4906
Teaching experience	3	4.28	.97	.4051
Interaction	3	2.65	.60	.6137
Error	376	4.40		

In summary, none of the eight sub-null hypotheses were rejected for there were no significant interaction effects. In addition, teaching experience had no significant effect upon how school psychologists and directors of special education perceived the ideal role of the school psychologist on the eight major activities. Also, the difference between the ideal role perceptions of school psychologists and directors of special education on six of the eight major activities were statistically significant. There was a tendency for school psychologists to perceive Diagnosis, Psycho-Educational Planning, Child Therapy, Community Relationships, Program Consultation, and Administration of Special Education Programs as slightly more important than the directors of special education. However, the relationship between these six dependent variables and group was small, and in general the differences in the means were not considered very meaningful.

### Null Hypothesis II

There is no interaction between amount of professional experience as either a school psychologist or director of special education and group membership on the perception of the ideal role of the school psychologist on each of the eight major activities.

The designs used to test this hypothesis were two-way fixed effects Analyses of Variance, one for each of the eight dependent variables. The group independent variable ( $N = 340$ ) had two levels: school psychologist ( $N = 255$ ) and directors of special education ( $N = 85$ ). The professional experience independent variable had three levels: 1-4 years, 5-9 years, 10+ years. To test this hypothesis it was possible to utilize a proportional design by dropping 44 subjects utilizing a table of random numbers. The use of a proportional design allowed for independent testing of each source of variation. Table 26 indicates the means and pooled standard deviations on the eight dependent measures and the number of subjects per cell in the design. In this null hypothesis the group main effect will not be tested since it was already considered under Null Hypothesis I. The only difference here in the group main effect (weighted means) would be due to the random removal of subjects to make this design proportional. Group membership was included in this design in order to remove the variation due to the group effect and thereby make the testing of this hypothesis more precise.

Diagnosis.--As shown in Table 27, there was no significant interaction effect between the amount of professional experience as either a school psychologist or director of special education and group membership on the dependent variable of Diagnosis. Also, the amount of

TABLE 26.--Means of the Eight Major Activities of the School Psychologist for Professional Experience x Group (N = 340).

Means of the Eight Activities										
Group	Years of Professional Experience	Number of Subjects Per Cell	Diagnosis	Psycho-Educational Planning	Child Therapy	Parent Counseling	Community Relations	School Program Consultation	Administration of Special Education	Research
School Psychologists	1-4	102	44.52	26.66	10.99	14.67	30.02	41.64	15.89	13.01
	5-9	102	44.75	26.35	11.34	15.08	30.26	41.69	16.12	13.07
	10+	51	45.37	26.22	12.27	15.24	32.53	44.47	18.08	13.78
Directors of Special Education	1-4	34	43.26	25.82	10.38	15.53	29.32	39.29	15.26	12.50
	5-9	34	43.12	26.00	10.18	15.41	31.09	39.41	14.68	13.44
	10+	17	42.83	24.24	9.94	14.59	27.82	35.53	11.94	12.82
	Pooled Standard Deviation		3.66	2.32	2.09	1.84	3.49	5.22	2.86	2.11

professional experience as either a school psychologist or director of special education had no significant effect upon the perception of the importance of Diagnosis in the ideal school psychologist role.

TABLE 27.--Two-way Fixed Effects ANOVA on Professional Experience and Group Membership--Dependent Measure: Diagnosis.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	173.77	12.95	.0004*
Professional Experience	2	6.81	.51	.6025
Interaction	2	6.50	.48	.6166
Error	334	13.42		

Psycho-Educational Planning.--As shown in Table 28, there was no significant interaction effect between the amount of professional experience as either a school psychologist or director of special education and group membership on the dependent variable of Psycho-Educational Planning. Also, the amount of professional experience as either a school psychologist or director of special education had no significant effect upon the perception of the importance of Psycho-Educational Planning in the ideal school psychologist role.

TABLE 28.--Two-way Fixed Effects ANOVA on Professional Experience and Group Membership--Dependent Measure: Psycho-Educational Planning.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	48.32	9.01	.0029*
Professional Experience	2	12.15	2.27	.1053
Interaction	2	11.29	2.10	.1235
Error	334	5.36		

Child Therapy.--As shown in Table 29, there was no significant interaction effect between amount of professional experience as either a school psychologist or director of special education and group membership on the dependent variable of Child Therapy. There was a significant professional experience main effect. The weighted means indicated that as the amount of professional experience increased, the importance of Child Therapy increased as perceived by both groups. (Means for amount of professional experience: 1-4 years = 10.8; 5-9 years = 11.1; 10+ years = 11.7.) The proportion of the total variance of the dependent measure accounted for by the professional experience effect was 1.5%, suggesting a small association between the dependent variable and amount of professional experience.

TABLE 29.--Two-way Fixed Effects ANOVA on Professional Experience and Group Membership--Dependent Measure : Child Therapy.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	88.24	20.21	.0001*
Professional Experience	2	16.70	3.82	.0228*
Interaction	2	12.66	2.90	.0565
Error	334	4.37		

Parent Counseling.--As shown in Table 30, the null hypothesis for the dependent variable of Parent Counseling could not be rejected for there was no interaction effect. The amount of professional experience did not have any significant effect on the perception of the ideal role of the school psychologist for the dependent variable of Parent Counseling.

TABLE 30.--Two-way Fixed Effects ANOVA on Professional Experience and Group Membership--Dependent Measure: Parent Counseling.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	7.77	2.29	.1314
Professional Experience	2	2.73	.80	.4489
Interaction	2	9.69	2.85	.0590
Error	334	3.40		

Community Relationships.--As shown in Table 31, there was a significant interaction effect between amount of professional experience and group membership on the dependent variable of Community Relationships. The means indicated that school psychologists with 10 or more years of professional experience as compared to school psychologists with less experience perceived Community Relationships as more important for the school psychologist in the ideal role, whereas the directors of special education with 10 or more years of professional experience as compared to directors with less experience perceived it to be less important (see Figure 1). This interaction effect accounted for 5.08% of the total variance of the dependent measure and indicated only a small relationship between the dependent variable and the source of variation.

There was a significant professional experience main effect. The means indicated that as the amount of professional experience increased, the importance of Community Relationships increased as perceived by both groups. (Means for professional experience: 1-4 years = 29.9; 5-9 years = 30.5; 10+ years = 31.4). The proportion of

the total variance of the dependent measure accounted for by the professional experience effect was 1.8% suggesting that the relationship between the dependent variable and professional experience was small.

TABLE 31.--Two-way Fixed Effects ANOVA on Professional Experience and Group Membership--Dependent Measure: Community Relationships.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	55.07	4.52	.0343*
Professional Experience	2	53.07	4.35	.0136*
Interaction	2	126.53	10.38	.0001*
Error	334	12.19		

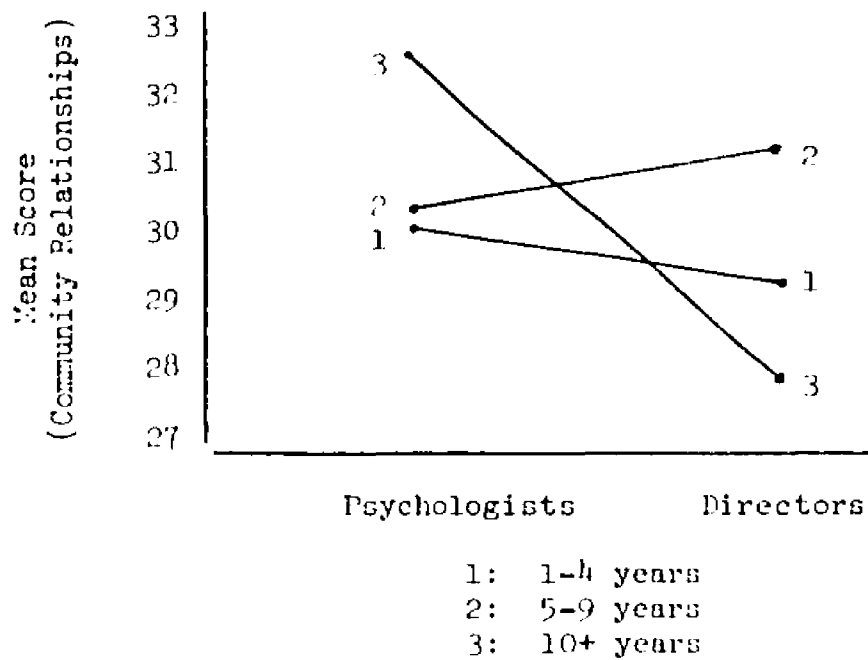


Figure 1.--Group x Amount of Professional Experience Interaction for the Variable--Community Relationships.

Program Consultation.--As shown in Table 32, there was a significant interaction effect between amount of professional experience and group membership on the dependent variable of Program Consultation. The means indicated that school psychologists with 10 or more years of professional experience as compared to school psychologists with less experience perceived Program Consultation as more important for the school psychologist in the ideal role, whereas the directors of special education with 10 or more years of professional experience as compared to directors with less experience perceived it to be less important (see Figure 2). It should be noted, however, that this interaction effect accounted for 3.76% of the total variance of the dependent measure suggesting only a very small relationship between the dependent variable and the source of variation. Amount of professional experience had no significant effect upon the perception of Program Consultation in the ideal school psychologist role.

TABLE 32.--Two-way Fixed Effects ANOVA on Professional Experience and Group Membership--Dependent Measure: Program Consultation.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	842.48	30.87	.0001*
Professional Experience	2	36.17	1.33	.2672
Interaction	2	224.37	8.22	.0004*
Error	334	27.29		



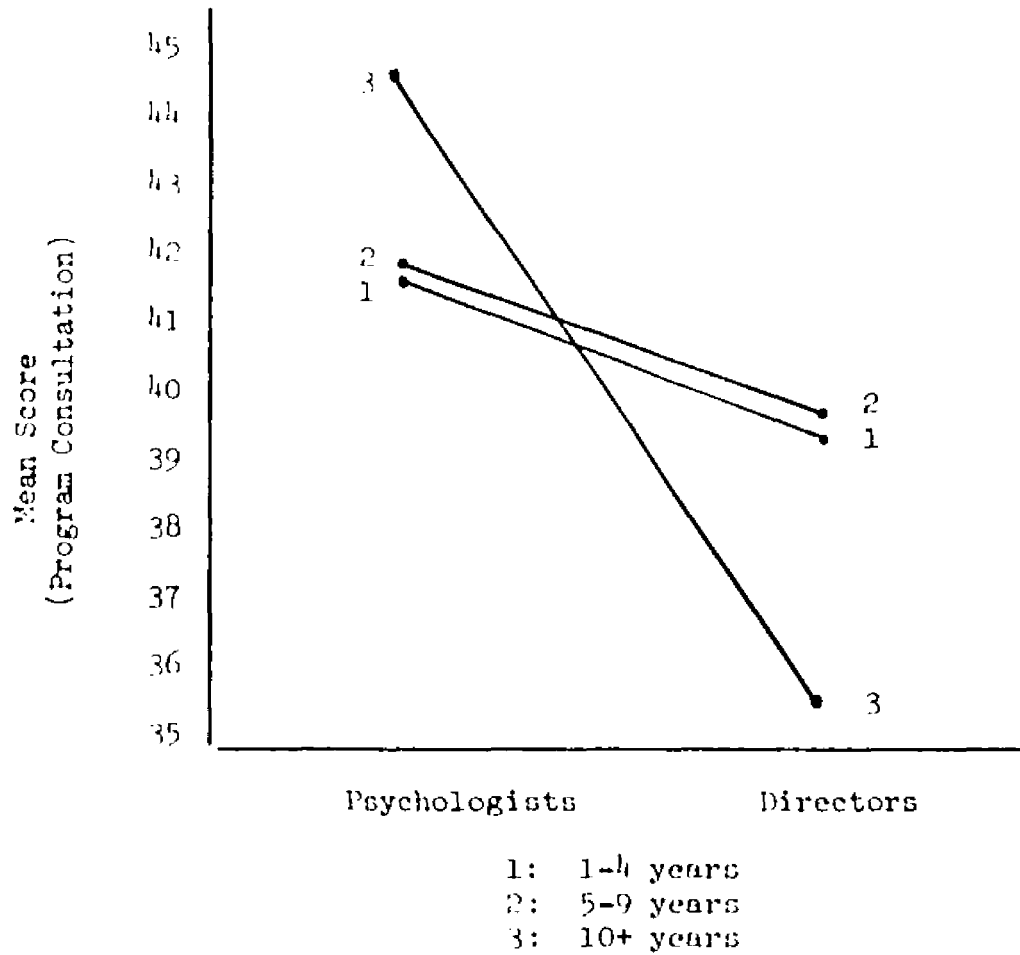


Figure 2.--Group x Amount of Professional Experience Interaction for the Variable--Program Consultation.

Administration of Special Education.--As shown in Table 33, there was a significant interaction effect between amount of professional experience and group membership on the dependent variable of Administration of Special Education. The means indicated that school psychologists with 10 or more years of professional experience as compared to school psychologists with less experience perceived Administration of Special Education as more important for the school psychologist in the ideal role, whereas the directors of special education with 10 or more years of professional experience as compared to directors with less experience perceived it to be less important (see Figure 3). This interaction effect accounted for 8.8% of the total variance of the dependent measure and indicated only a small relationship between the dependent variable and the source of variation. Amount of professional experience had no significant effect upon the perception of Administration of Special Education in the ideal school psychologist role.

TABLE 33.--Two-way Fixed Effects ANOVA on Professional Experience and Group Membership--Dependent Measure: Administration of Special Education.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	269.19	33.02	.0001*
Professional Experience	2	17.33	2.13	.1210
Interaction	2	137.03	16.81	.0001*
Error	334	8.15		

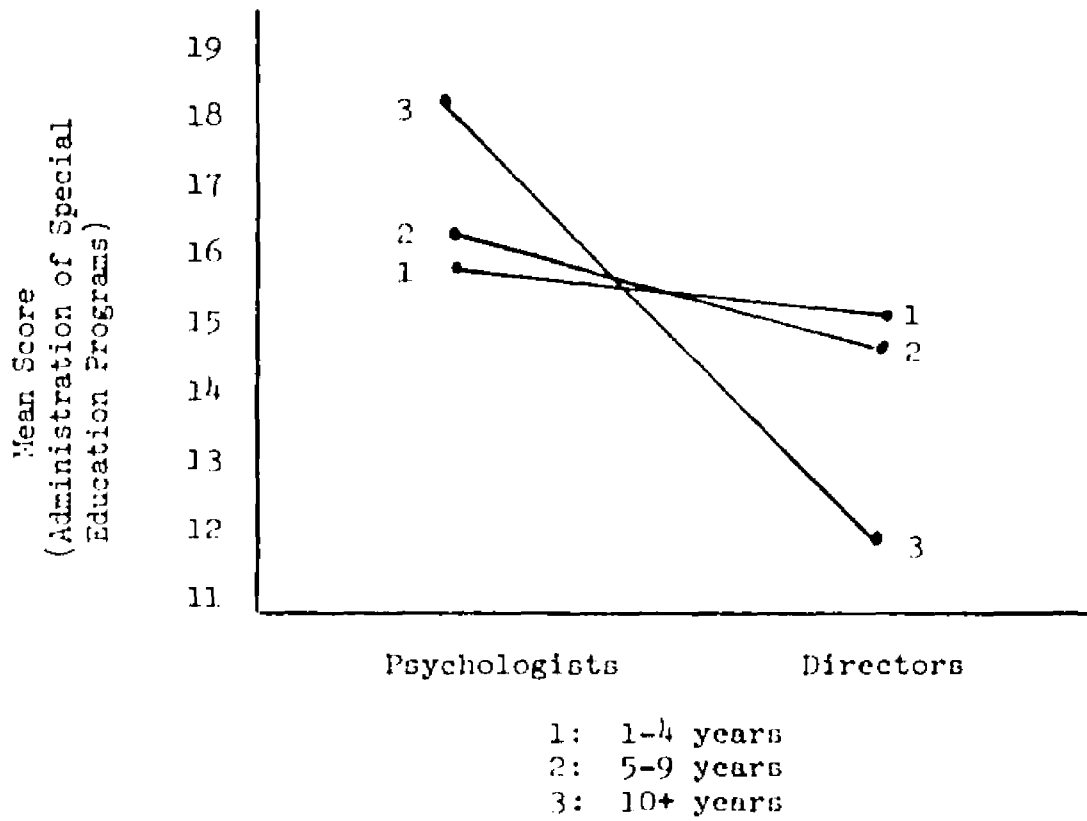


Figure 3.--Group x Amount of Professional Experience Interaction for the Variable--Administration of Special Education Programs.

Research.--As shown in Table 34, there was no significant interaction effect between amount of professional experience and group membership on the dependent variable of Research. Also, the amount of professional experience did not have a significant effect on the perception of the ideal role of the school psychologist for the dependent variable of Research.

TABLE 34.--Two-way Fixed Effects ANOVA on Professional Experience and Group Membership--Dependent Measure: Research.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	3.89	.87	.3507
Professional Experience	2	10.07	2.26	.1059
Interaction	2	9.02	2.03	.1335
Error	334	4.45		

In summary, three of the eight sub-null hypotheses were rejected as there were three significant interaction effects. There was a slight tendency for school psychologists with 10 or more years of professional experience as compared to school psychologists with less experience to perceive Community Relationships, Program and Curriculum Consultation, and Administration of Special Education Programs as more important in the ideal role of the school psychologist. On the other hand, the directors of special education with 10 or more years of professional experience as compared to directors with less experience perceived these same three variables as less important in the ideal role of the school psychologist. In addition, the amount of professional experience either as a school psychologist or director of special education

in general had little effect upon the perception of the eight major activities in the ideal role of the school psychologist. There was a slight tendency, however, for the respondents, as their professional experience increased, to perceive Child Therapy and Community Relationships as increasingly more important.

### Null Hypothesis III

There is no interaction between type and size of school district in which the school psychologist and director of special education are employed and group membership on the perception of the ideal role of the school psychologist on each of the eight major activities.

The designs used to test this hypothesis were a three-way fixed effects Analyses of Variance, one for each of the eight dependent variables. The group independent variable ( $N = 382$ ) had two levels: school psychologists ( $N = 293$ ) and directors of special education ( $N = 89$ ). The type of district independent variable had two levels: local and intermediate school districts. The size of the district independent variable had three levels based upon total public school student enrollment: small (0-9999), medium (10,000-24,999), and large (25,000+). This was an unbalanced design since there was an unequal number of subjects per cell. Because of this unbalanced design it was not possible to test each source of variation independently. Therefore, for each of the eight Analyses of Variance, when a significant source of variation was identified, other sources of variation were not considered because they were not independent of the source of variation which had been found to be significant. Table 35 indicates the means and pooled standard deviations on the eight dependent measures and the number of subjects per cell in the design. The

TABLE 35.--Means of the Eight Major Activities of the School Psychologist for Size x District  
x Group (N = 382).

Means of the Eight Activities											
Group	District	Size	Number of Subjects Per Cell	Diagnosis	Psycho- Educational Planning	Child Therapy	Parent Counseling	Community Relations	School Program Consultation	Administration of Special Education	Research
School Psychol- ogists	Local	1	64	44.94	26.33	11.47	15.00	29.41	42.11	16.64	13.09
		2	66	45.23	26.77	11.27	14.71	30.45	41.92	16.48	13.20
		3	55	45.35	26.82	11.75	15.20	31.40	43.82	16.64	13.82
	Inter- mediate	1	33	43.67	26.12	11.03	14.33	30.42	41.27	16.55	12.48
		2	45	43.56	26.33	10.76	15.22	30.96	41.60	16.20	12.98
		3	30	44.17	25.87	11.77	15.33	31.97	41.90	15.67	13.10

TABLE 35.--(cont'd.)

Means of the Eight Activities											
Group	District	Size	Number of Subjects Per Cell	Diagnosis	Psycho- Educational Planning	Child Therapy	Parent Counseling	Community Relations	School Program Consultation	Administration of Special Education	Research
Directors of Special Education	Local	1	27	43.96	26.11	10.67	15.33	30.59	39.07	14.26	13.11
		2	16	43.24	26.25	10.50	15.44	28.31	40.00	14.38	13.69
		3	5	40.80	22.80	9.80	15.00	29.40	35.40	12.80	12.20
	Inter- mediate	1	11	42.73	25.09	9.82	15.36	29.82	40.55	14.09	13.64
		2	16	41.50	25.22	10.00	15.78	29.67	37.17	15.28	11.83
		3	12	43.00	24.83	9.75	14.33	29.83	37.83	14.33	13.17
Pooled Standard Deviation				3.62	2.37	2.13	1.84	3.57	5.35	3.07	2.07

Size 1 = 0-9999

Size 2 = 10,000-24,999

Size 3 = 25,000+

group main effect was not tested since it was already considered under Null Hypothesis I.

Diagnosis.--As shown in Table 36, there were no significant interaction effects between type and size of school district and group membership on the dependent variable of Diagnosis. There was a significant district effect. The weighted means for the districts indicated that the respondents from local school districts perceived Diagnosis as more important than the respondents from intermediate school districts (Mean of local district: 44.9; Mean of intermediate district: 43.3). The proportion of the total variance of the dependent measure accounted for by this district effect was 2.8% which indicated only a small relationship between the dependent variable and source of variation.

TABLE 36.--Three-way Fixed Effects ANOVA on Type of School District and Size of District and Group Membership--Dependent Measure: Diagnosis.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	184.74	14.08	.0003
Size	2	2.94	.22	.7992
District	1	173.27	13.71	.0004*
Group x Size	2	7.05	.54	.5849
Size x District	2	10.10	.77	.4639
Group x District	1	1.90	.14	.7040
Group x Size x District	2	17.99	1.37	.2551
Error	370	13.12		



Psycho-Educational Planning.--As shown in Table 37, there were no significant interaction effects between type and size of school district and group membership on the dependent variable of Psycho-Educational Planning. There was a significant district effect. The weighted means for the districts indicated that the respondents from local school districts perceived Psycho-Educational Planning as more important than the respondents from intermediate districts (mean of local district: 26.5; mean of intermediate district: 25.9). The proportion of the total variance of the dependent measure accounted for by this district effect was 1.0% which suggested only a slight association between the dependent variable and source of variation.

TABLE 37.--Three-way Fixed Effects ANOVA on Type of School District and Size of District and Group Membership--Dependent Measure: Psycho-Educational Planning.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	65.37	11.62	.0008
Size	2	3.75	.67	.5143
District	1	29.05	5.16	.0237*
Group x Size	2	12.05	2.14	.1188
Size x District	2	.21	.04	.9641
Group x District	1	.01	.00	.9611
Group x Size x District	2	16.31	2.90	.0563
Error	370	5.62		

Child Therapy.--As shown in Table 38, there were no significant interaction effects between type and size of school district and group membership on the dependent variable of Child Therapy. Neither the type of district nor the size of the district had a significant effect upon

the perception of the respondents concerning the importance of Child Therapy.

TABLE 38.--Three-way Fixed Effects ANOVA on Type of School District and Size of District and Group Membership--Dependent Measure: Child Therapy.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	86.15	19.08	.0001*
Size	2	6.94	1.54	.2165
District	1	16.05	3.55	.0602
Group x Size	2	5.67	1.26	.2859
Size x District	2	2.47	.55	.5795
Group x District	1	.40	.09	.7665
Group x Size x District	2	.29	.06	.9373
Error	370	4.52		

Parent Counseling.--As shown in Table 39, there was a significant interaction effect between size of school district and group membership on the dependent variable of Parent Counseling (see Figure 4). This interaction indicated that as the size of the district increased, school psychologists tended to perceive Parent Counseling as increasingly more important whereas directors of special education from large school districts (25,000+) perceived Parent Counseling as less important than did the directors in smaller districts. The proportion of the total variance of the dependent measure accounted for by this interaction was 1.1% and indicated only a small association between the interaction and mean scores on Parent Counseling.

TABLE 39.--Three-way Fixed Effects ANOVA on Type of School District and Size of District and Group Membership--Dependent Measure: Parent Counseling.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	7.27	2.15	.1434
Size	2	1.77	.52	.5935
District	1	.05	.01	.9075
Group x Size	2	10.32	3.05	.0484*
Size x District	2	7.29	2.16	.1172
Group x District	1	.02	.01	.9414
Group x Size x District	2	2.44	.72	.4870
Error	370	3.38		

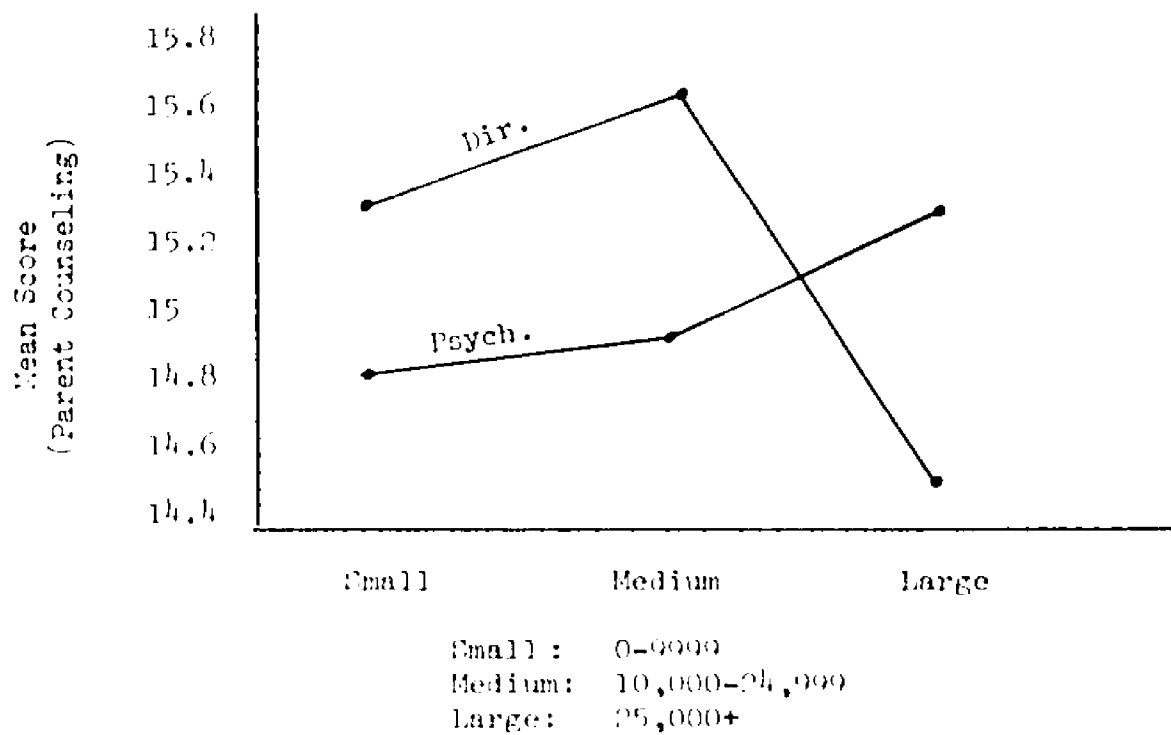


Figure 4.--Group x Size of District Interaction for the Variable--Parent Counseling.

Community Relationships.--As shown in Table 40, there was a significant interaction effect between size of school district and group membership on the dependent variable of Community Relationships (see Figure 5). This interaction indicated that as the size of the district increased, school psychologists perceived Community Relationships as increasingly more important, whereas the directors from small districts (0-9999) had a tendency to perceive Community Relationships as more important than the directors from larger size districts. The proportion of the total variance of the dependent measure accounted for by this interaction effect was 1.5% and indicated only a small relationship between the interaction and mean scores on Community Relationships.

TABLE 40.--Three-way Fixed Effects ANOVA on Type of School District and Size of District and Group Membership--Dependent Measure: Community Relationships.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	55.42	4.34	.0380
Size	2	48.71	3.81	.0230
District	1	20.95	1.64	.2012
Group x Size	2	50.60	3.96	.0199*
Size x District	2	.27	.02	.9789
Group x District	1	1.79	.14	.7081
Group x Size x District	2	10.71	.84	.4333
Error	370	12.77		

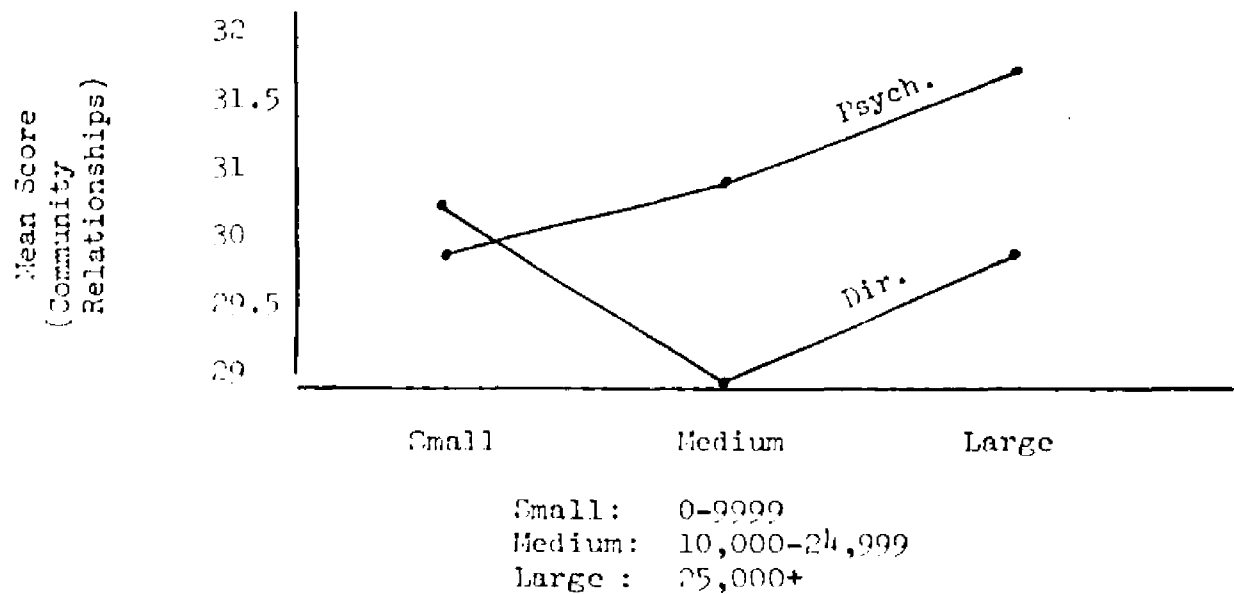


Figure 5.--Group x Size of District Interaction for the Variable--Community Relationships.

school district and group membership on the dependent variable Program Consultation.--As shown in Table 41, there were no significant interaction effects between type and size of school district and group membership on the dependent variable of Program Consultation. Neither the type of district nor the size of the district had a significant effect upon the perception of the respondents concerning the importance of Program Consultation.

Administration of Special Education.--As shown in Table 42, there were no significant interaction effects between type and size of school district and group membership on the dependent variable of Administration of Special Education. Neither the type of district nor the size of the district had a significant effect upon the perception of the respondents concerning the importance of Administration of Special Education.

TABLE 41.--Three-way Fixed Effects ANOVA on Type of School District and Size of District and Group Membership--Dependent Measure: Program Consultation.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	851.42	29.79	.0001*
Size	2	23.24	.81	.4444
District	1	74.92	2.62	.1064
Group x Size	2	53.42	1.87	.1558
Size x District	2	7.43	.26	.7714
Group x District	1	6.76	.24	.6271
Group x Size x District	2	60.47	2.12	.1221
Error	370	28.58		

TABLE 42.--Three-way Fixed Effects ANOVA on Type of School District and Size of District and Group Membership--Dependent Measure: Administration of Special Education.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	282.24	30.02	.0001*
Size	2	2.69	.29	.7510
District	1	2.98	.32	.5740
Group x Size	2	6.39	.68	.5073
Size x District	2	2.51	.27	.7658
Group x District	1	14.23	1.51	.2194
Group x Size x District	2	6.79	.72	.4864
Error	370	9.40		

Research.--As shown in Table 43, there was a significant Group by Size by District interaction effect on the dependent variable of Research (see Figure 6). This interaction indicated that there was a slight tendency for school psychologists in both local and intermediate school districts to perceive of Research as increasingly more important as the size of the district increased. The directors of special

TABLE 43.--Three-way Fixed Effects ANOVA on Type of School District and Size of District and Group Membership--Dependent Measure: Research.

Sources of Variation	df	Mean Square	F ratio	p. less than
Group	1	2.46	.57	.4489
Size	2	6.99	1.64	.1964
District	1	23.17	5.42	.0205
Group x Size	2	4.73	1.11	.3317
Size x District	2	.74	.17	.8411
Group x District	1	.07	.02	.8978
Group x Size x District	2	16.50	3.86	.0220*
Error	370	4.27		

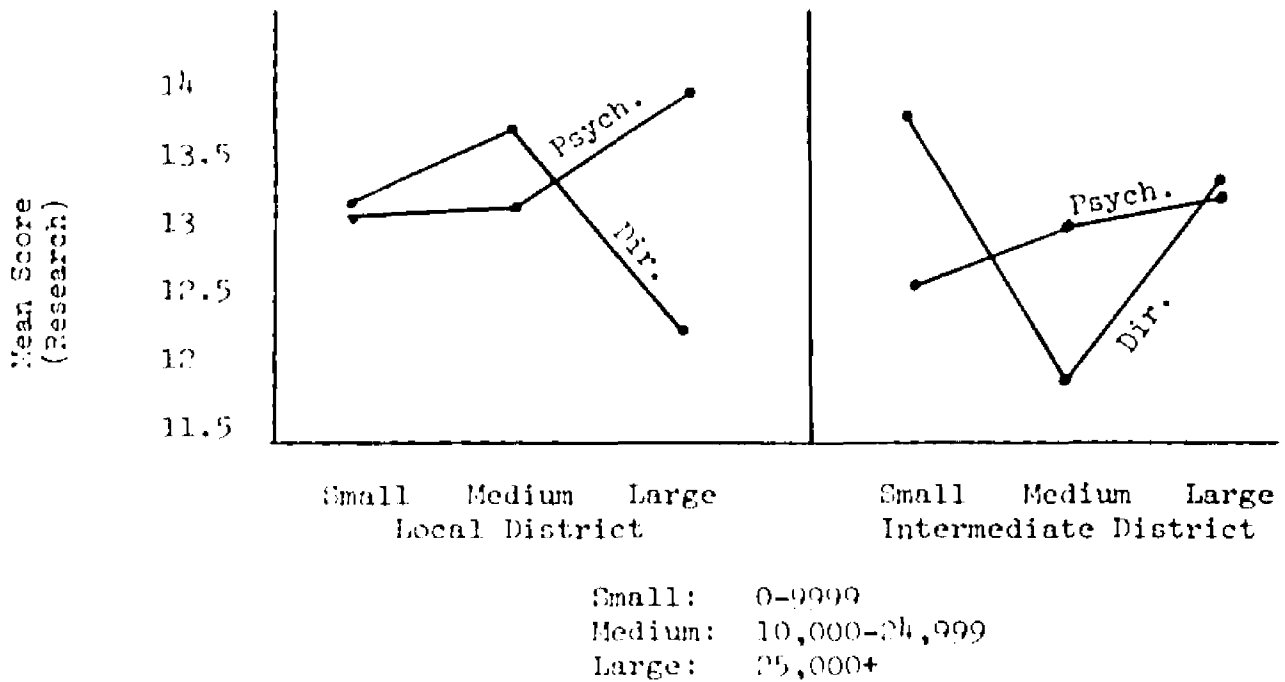


Figure 6.--Group x Size of District x Type of District Interaction for the Variable--Research.

education, on the other hand, exhibited completely different interaction patterns for local and intermediate districts. In local districts of medium size, directors of special education as compared to directors in local districts of small or large size perceived Research as more important, whereas in intermediate districts of medium size, directors of special education as compared to directors in intermediate districts of small or large size perceived Research as less important. This interaction effect accounted for 1.5% of the total variance of the dependent measure and indicated that there was only a small association between this interaction and the mean scores on Research.

In summary, the null hypotheses could not be rejected in seven of the eight tests of the hypothesis. There was a group by size by district interaction for the dependent variable of Research. There was a group by size interaction for the dependent variables of Parent Counseling and Community Relationships. There was a slight tendency for respondents from local districts as compared to respondents from intermediate districts to place more importance upon Diagnosis and Psycho-Educational Planning. In general, it did not appear that type of district and size of district had very much effect upon how school psychologists and directors of special education perceived the eight major activities in the ideal role of the school psychologist.



Perceived Relative Importance of the Fifty-Five  
Specific Activities in the Ideal Role  
of the School Psychologist with  
Significant Chi-Squares  
Identified

In order to portray the ideal role of the school psychologist as perceived by the respondents, the fifty-five activities were ranked in order of importance according to their total weighted mean scores (see Table 44). For this purpose the following scores were designated:

- 4.99 to 4.50 - "Must Perform"
- 4.49 to 4.00 - "Should Perform - High"
- 3.99 to 3.50 - "Should Perform - Low"
- 3.49 to 3.00 - "May Perform - High"
- 2.99 to 2.50 - "May Perform - Low"
- 2.49 to 2.00 - "Should Not Perform - High"
- 1.99 to 1.50 - "Should Not Perform - Low"

The Chi-Square Test of Homogeneity was calculated for each of these fifty-five specific activities in order to determine whether the distribution on each of these specific activities was different for school psychologists and directors of special education (see Appendix E). Twenty-five of these differences were significant at the .05 level and are underlined in Table 44. Twenty-four of these activities which are underlined were rated as more important by the school psychologists than by the directors of special education. The activity which is underlined and identified by ten asterisks was the only activity with a significant chi square which was rated as more important by the directors of special education than by the school psychologists; this activity reads as follows: "Give a written psychological report to the parents concerning the psychological and educational needs of their child."

TABLE 44.--Perceived Relative Importance of the Fifty-Five Specific Activities in the Ideal Role of the School Psychologist with Significant Chi Squares Identified.

Must Perform (4.99-4.50)	Total Weighted Means
38. Diagnose and evaluate the intellectual and cognitive difficulties of children	4.82
17. Present and interpret the specific diagnoses of children's problems to educational personnel	4.81
50. <u>Discuss the child's problem with the teacher as one of the means of diagnosis and evaluation</u>	4.81
11. Determine the eligibility of children for one of the types of available special education programs	4.76
15. <u>Diagnose and evaluate the learning disabilities of children</u>	4.64
45. <u>Administer and score individual standardized tests as one of the means of diagnosis and evaluation</u>	4.59
14. Include parents in school psycho-educational planning to discuss the psychological and educational needs of their child	4.57
43. <u>Cooperate with and utilize the services of the various psychological and educational agencies available in the community</u>	4.50
Should Perform - High (4.49-4.00)	
46. <u>Diagnose and evaluate the perceptual-motor problems of children</u>	4.49
3. Present and interpret the numerical scores of tests to educational personnel	4.44
2. Observe the child in the classroom or real life situation as one of the means of diagnosis and evaluation	4.43
32. <u>Study the social case history of the child as one of the means of diagnosis and evaluation</u>	4.43

TABLE 44.--(cont'd.)

Should Perform - High (4.49-4.00)	Total Weighted Means
8. Diagnose and evaluate the affective and emotional disorders of children	4.33
41. <u>Make suggestions to educational personnel for behavior management and/or Behavior Modification of children with adjustment problems</u>	4.16
39. Administer and score individual projective or non-standardized tests as one of the means of diagnosis and evaluation	4.14
54. <u>Prescribe specific curriculum materials to remediate the educational and learning problems of children</u>	4.04
30. Prescribe the use of techniques to remediate problems of visual-motor coordination in children	4.02
Should Perform - Low (3.99-3.50)	
42. Consult with administrators regarding ways to improve educational programs	3.98
27. Make home visitations to consult with parents regarding the psychological and educational needs of their child	3.86
12. Improve the level of public awareness of the needs of the handicapped	3.79
49. Provide inservice meetings for teachers	3.74
34. <u>Design alternative programs for exceptional children such as resource rooms and/or diagnostic learning centers</u>	3.68
47. Make presentations to P.T.A. groups concerning the general psychological and educational needs of children	3.68
13. <u>Diagnose and evaluate the social and family problems of children</u>	3.60

TABLE 44.--(cont'd)

Should Perform - Low (3.99-3.50)		Total Weighted Means
51.	Work as a member of a committee that is exploring a particular educational problem in the school district	3.60
37.	<u>Recommend needed changes in the curriculum of education programs</u>	3.59
16.	Disseminate information regarding how sociological and economic conditions can affect children's learning	3.55
28.	<u>Cooperate with several school districts to solve a larger community-wide or county-wide educational problem</u>	3.54
May Perform - High (3.49-3.00)		
29.	<u>Serve on community boards which are concerned with the needs of the handicapped</u>	3.49
9.	<u>Improve the educational opportunities of ethnic minority groups within the school program</u>	3.48
4.	<u>Write political representatives concerning needed educational legislation</u>	3.45
24.	Make presentations to civic organizations, community service clubs, and church groups	3.43
6.	Help to develop community mental health programs	3.39
52.	Perform research by reviewing and summarizing pertinent professional literature	3.39
7.	Perform research by designing and carrying out experimental studies	3.33
53.	<u>Help to formulate special education administrative policy</u>	3.30
48.	<u>Attend school board meetings to present new ideas to board members</u>	3.25

TABLE 44.--(cont'd.)

May Perform - High (3.49-3.00)		Total Weighted Means
33.	Perform research by using informal information gathering techniques such as discussions or interviews with teachers, administrators, and/or parents	3.24
18.	<u>Engage in educational and/or vocational counseling with students</u>	3.23
22.	<u>Conduct individual or group sessions with children in a therapeutic effort to bring about emotional, attitudinal, and/or behavioral change</u>	3.22
25.	Perform research by designing and using surveys	3.21
5.	<u>Recommend needed changes in the teacher staffing of educational programs</u>	3.19
May Perform - Low (2.99-2.50)		
19.	<u>Give a written psychological report to the parents concerning the psychological and educational needs of their child*****</u>	
44.	<u>Design, submit, and evaluate proposals for educational programs funded by federal and state agencies</u>	2.99
35.	Recommend needed changes in the physical structure and equipment of the school plant or playground	2.98
26.	<u>Participate in recruitment of staff for special education programs</u>	2.94
23.	Help to develop sheltered workshop programs in the community	2.90
55.	Help to develop employment opportunities for the handicapped in the community	2.86
10.	Coordinate a group achievement testing program for the general educational program	2.79

TABLE 44.--(cont'd.)

May Perform - Low (2.99-2.50)		Total Weighted Means
20.	Engage directly with children in recreational therapy	2.64
1.	Help to develop recreational activities for the handi- capped in the community outside of the school environment	2.62
40.	<u>Organize and supervise one of the specific educational programs within the total special education program</u>	2.60
Should Not Perform - High (2.49-2.00)		
21.	<u>Supervise special education personnel</u>	2.48
36.	Remediate learning problems by directly tutoring children	2.03
Should Not Perform - Low (1.99-1.50)		
31.	Make transportation arrangements for exceptional children	1.89

### Rankings of the Eight Major Activities

#### Present and Ideal Roles

Both the school psychologists and directors of special education were asked to rank the eight major activities according to their importance to the school psychologist in the present role (as it is now) and according to their importance in the ideal role. As shown in Table 45, the school psychologists and directors of special education were in very close agreement on the rankings of the eight major activities of the school psychologist in both the present and ideal roles. Kendall's Coefficient of Concordance, which was used to measure the extent of agreement between the two groups, was .98 for the present role and .96 for the ideal role.

As indicated by the sum of the mean rankings as perceived by both school psychologists and directors of special education in Table 45, Diagnosis was considered to be the more important activity in the ideal role of the school psychologist, although school psychologists considered Psycho-Educational Planning as a slightly more important activity of the school psychologist in the ideal role. This may indicate that school psychologists were very much concerned about helping teachers apply psychological and educational principles in the planning of a child's school program. Following Diagnosis and Psycho-Educational Planning in importance were Parent Counseling and Child Psychotherapy and/or Counseling. These first four activities are very child-centered and behavior change oriented which may indicate that both school psychologists and directors of special education perceived the school

TABLE 45.--Mean Rankings of Eight Activities: Relative Importance in both the Present and Ideal Role of the School Psychologist.<sup>1</sup>

	Psychologists		Directors	
	Pres. Role	Ideal Role	Pres. Role	Ideal Role
Diagnosis	1.29 (1)	2.06 (2)	1.31 (1)	1.70 (1)
Psycho-Educational Planning	2.06 (2)	1.86 (1)	2.07 (2)	1.91 (2)
Parent Consultation	3.15 (3)	3.40 (3)	3.33 (3)	3.53 (3)
Child Therapy	5.58 (5)	4.38 (4)	5.43 (5)	4.60 (5)
School Program Consultation	4.84 (4)	4.78 (5)	4.14 (4)	4.50 (4)
Research	6.70 (8)	6.28 (7)	6.51 (7)	5.97 (6)
Community Relationships	5.76 (6)	6.25 (6)	5.73 (6)	6.08 (7)
Administration of Special Education	6.62 (7)	6.98 (8)	7.49 (8)	7.71 (8)

<sup>1</sup>The order of the eight activities in the left-hand column is based upon the sum of the mean rankings for the ideal role of the school psychologist as perceived by both school psychologists and directors of special education. Numbers in parenthesis indicate new rankings derived from the mean rankings. It should be noted that a low number is a higher ranking.



psychologists as child-centered and as a behavior change agent in the schools.

The changes from the present to the ideal role of the school psychologist were considered surprisingly minimal within both groups. The Kendall Coefficient of Concordance between the present and the ideal role was very high (.96 for school psychologists and .99 for directors of special education). When comparing mean ranks of the present with the ideal role, both school psychologists and directors of special education perceived a greater need in the ideal role than in the present role to provide more psycho-educational planning, psychotherapy and/or counseling with children, and research. Both groups perceived a lesser need in the ideal role than in the present for diagnosis, community relationships, and administration of special education programs. Directors of special education placed less emphasis in the ideal role upon school program consultation than did the school psychologists.

#### Percentage of Time to Spend

Both the school psychologists and directors of special education were asked to specify the percentage of professional time which they perceived as necessary for the school psychologist to spend in each of the eight major activities in the ideal role. As shown in Table 46, both school psychologists and directors of special education were in general agreement as to the amount of time which should be spent in the various activities. When these activities were ranked from one to eight according to the time to spend in the ideal role of the school psychologist, the two groups were in perfect agreement. It

appeared that the largest difference between the two groups was in the diagnostic area; the directors of special education placed a slightly greater emphasis upon the time which should be spent in diagnostic testing. Both groups perceived the school psychologist as spending the majority of his time in Diagnostic Testing and Psycho-Educational Planning.

TABLE 46.--Eight Activities: Percentage of Time to Spend in the Ideal Role of the School Psychologist.

	Psychologists	Directors
Diagnosis	30.2	37.2
Psycho-Educational Planning	23.0	23.5
Parent Consultation	13.3	11.5
Child Therapy	11.6	9.5
School Curriculum and Program Consultation	8.5	8.0
Research	5.4	4.7
Community Relationships	4.5	4.6
Administration of Special Education	3.5	1.0

Adequacy of Preparation  
for Activities

The school psychologists and directors of special education were asked to rank the eight major activities according to the extent school psychologists were prepared to perform them in the ideal role of the school psychologist. As shown in Table 47, the school psychologists and directors were in perfect agreement with respect to the relative

rankings of these eight activities. Both groups perceived the school psychologists as more adequately prepared in Diagnosis and Psycho-Educational Planning than in Community Relationships and Administration.

TABLE 47.--Mean Rankings of Eight Activities: Adequacy of Preparation to Perform in the Ideal Role of the School Psychologist.

	Psychologists	Directors
Diagnosis	1.10	1.11
Psycho-Educational Planning	2.64	2.82
Parent Consultation	3.66	3.70
Child Therapy	5.08	4.83
School Curriculum and Program Consultation	5.14	4.93
Research	5.61	5.44
Community Relationships	6.16	5.82
Administration of Special Education	6.58	7.35

Extent of Agreement  
Between the Rankings

Summaries of the comparisons of the rankings for both school psychologists and directors of special education utilizing Kendall's Coefficient of Concordance are presented in Tables 48 and 49. These high correlations indicate that within both groups the rankings of the eight major activities are almost identical for the present role, the ideal role, the adequacy of preparation, and percent of time to spend.

TABLE 48.--Comparison of Four Rankings of Eight Major Activities by  
School Psychologists: Kendall's Coefficient of  
Concordance.

	Present Role	Ideal Role	Adequacy of Preparation
Ideal Role	.96		
Adequacy of Preparation	.95	.98	
% of Time to Spend	.95	.98	1.00

TABLE 49.--Comparison of Four Rankings of Eight Major Activities by  
Directors of Special Education: Kendall's Coefficient of  
Concordance.

	Present Role	Ideal Role	Adequacy of Preparation
Ideal Role	.99		
Adequacy of Preparation	.98	.99	
% of Time to Spend	.98	.99	1.00

Children Who Should Receive Professional  
Psychological Services from the  
School Psychologist in the  
Ideal Role

As shown in Table 50, both the school psychologists and directors of special education placed a greater emphasis upon providing psychological services to the mentally retarded than to any of the other children. Following the mentally retarded the school psychologists and directors of special education placed importance upon serving the learning disabled, emotionally disturbed, and the multiply-handicapped. Both the school psychologists and directors of special education perceived the normal child as not having a high priority for receiving the services of the school psychologist.

Settings for School Psychological  
Activities

Number of Students to be Served  
by the School Psychologist

As shown in Table 51, a majority of both the school psychologists and directors of special education desired a decrease in the present ratio of one school psychologist for 5000 student population. According to this data 81% of the school psychologists in Michigan and 61% of the directors of special education desired a ratio of 2500 students or less for every school psychologist.

TABLE 50.--Children Who Should Receive Professional Psychological Services from the School Psychologist in the Ideal Role (Percentage of Respondents).

	Psychologists					Directors				
	Must Serve	Should Serve	May Serve	Should Not Serve	Must Not Serve	Must Serve	Should Serve	May Serve	Should Not Serve	Must Not Serve
Mentally Retarded	90	9	0	0	1	91.5	7.5	1	0	0
Learning Disabled	82	14	3	.5	.5	65	28	7	0	0
Emotionally Disturbed	78	18	3	.5	.5	71.3	22.3	6.4	0	0
Multiply Handicapped	53.5	32	13.5	.5	.5	60.5	31	8.5	0	0
Visually Handicapped	33.5	30	32.5	3.5	.5	23	43	33	1	0
Deaf and Hard of Hearing	33	31	31	4.5	.5	24	44	31	1	0
Orthopedically Handicapped	33	30	32.5	4	.5	27	40	33	0	0
Gifted	24	44.5	30.5	.5	.5	17	28	50	3	2
Normal Child	13	23	51	9	4	11	20	61	3	5

TABLE 51.--Number of Students to be Served by the School Psychologist.

Group	2000		2500		3000		4000		5000	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 315)	44	(139)	37	(115)	13	(40)	3	(11)	3	(10)
Directors (N = 97)	27	(26)	34	(33)	21	(20)	7	(7)	11	(11)
Totals	40	(165)	36	(148)	15	(60)	4	(18)	5	(21)

Various Programs Which May be  
Served by the School Psychologist

As shown in Table 52, programs which have a special education emphasis were considered to be of more importance for the school psychologist to serve than other kinds of programs. The most important programs for the school psychologist to serve were special education programs housed in the regular school since 90% of the school psychologists and 96% of the directors of special education perceived that the school psychologist "must serve" these programs. Also, it should be noted that 64% of the school psychologists and 71% of the directors perceived that the school psychologist "must serve" special education schools or facilities serving day students. Whereas almost 50% of the school psychologists perceived that they "must serve" regular school programs, only 24% of the directors perceived this. However, both school psychologists (80%) and directors (61%) perceived that school psychologists "must" or "should serve" regular programs to some degree. Pre-school programs were considered important as 83% of the school psychologists and 82% of the directors perceived that school psychologists "must" or "should serve" these programs. Residential school

TABLE 52.--Various Programs Served by the School Psychologists (by percentage of respondents).

Program	N	School Psychologists					N	Directors				
		Must	Should	May	Should Not	Must Not		Must	Should	May	Should Not	Must Not
Special Education Programs <sup>1</sup>	311	90	9	1	-	-	97	96	3	1	-	-
Special Education Schools <sup>2</sup>	307	63.5	22	12	2	.5	97	71	18	7	2	2
Pre-School Programs	311	37	46	17	-	-	97	39	43	16	1	1
Regular School Programs	310	48	32	17	2	1	97	24	37	35	2	2
Residential Schools	304	19	18.5	40	15.5	7	97	27	13	29	18.5	12.5
Institutional Programs	304	14.5	13	39	21	12.5	97	25	9	32	16.5	17.5
Summer School	307	9.5	30	56	4	.5	97	12	26	53	8	1

<sup>1</sup>Housed in the regular school<sup>2</sup>Separate schools serving day students



programs, institutional programs, and summer school programs were not considered as important for the school psychologists to serve since the plurality of the responses were in the "may serve" category.

The School Psychologist's Immediate Supervisor in the Ideal Role

As shown in Table 53, the majority (57%) of the school psychologists desired to be immediately responsible to a director or coordinator of psychological services, whereas the majority of directors of special education (58.5%) desired that school psychologists should be immediately responsible to them.

TABLE 53.--The School Psychologist's Immediate Supervisor in the Ideal Role.

Group	Director of Pupil Personnel % (N)	Director of Special Education % (N)	Superintendent % (N)	Director or Coordinator of Psychological Services % (N)	Other % (N)
Psychologists (N = 312)	12 (36)	22 (68)	5 (17)	57 (179)	4 (12)
Directors (N = 96)	10.5 (10)	58.5 (56)	0 (0)	28 (27)	3 (3)
Totals	11 (46)	30.5 (124)	4 (17)	50.5 (206)	4 (15)

To summarize the settings for school psychological activities, the majority of both respondent groups were in agreement that a school psychologist should serve a student population of 2500 or less. They both also agreed that the most important settings for school psychologists to serve included those

settings which had either a special education or pre-school emphasis. There was a slight difference of opinion as to the extent to which regular school programs should be served, with the school psychologists perceiving these programs as more important than the directors. Also, there was some difference of opinion as to whom the school psychologist should be immediately responsible. The school psychologist favored a director or coordinator of psychological services as his immediate supervisor whereas the director of special education favored himself as the supervisor.

Professional Needs of School Psychologists  
in the Ideal Role

Years of Recommended Teaching  
Experience for School  
Psychologists

As shown in Table 54, 34% of the school psychologists and 26% of the directors of special education perceived that school psychologists needed no teaching experience. Slightly more than one-third (36%) of the school psychologists and 30% of the directors of special education perceived that 1-2 years were sufficient. A total of 66% of the school psychologists would like school psychologists to have some teaching experience whereas 74% of the directors of special education would like them to have some teaching experience. It is evident that the directors of special education favored more teaching experience for school psychologists than did the school psychologists themselves, but very few of the respondents perceived it should be as much as five years or more.

TABLE 54.--Years of Recommended Teaching Experience for School Psychologists.

Group	0		1-2		3-4		5+	
	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 317)	34	(109)	36	(113)	23	(72)	7	(23)
Directors (N = 97)	26	(25)	30	(29)	38	(37)	6	(6)
Totals	32.4	(134)	34.3	(142)	26.3	(109)	7	(29)

Teaching Certification for  
School Psychologists

A total of 60% of the school psychologists either agreed or strongly agreed that school psychologists should have a teacher's certificate whereas a total of 72% of the directors of special education agreed or strongly agreed (see Table 55).

TABLE 55.--Teacher Certification for School Psychologists.

Group	Strongly Agree		Agree		Disagree		Strongly Disagree	
	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 314)	31	(98)	29	(92)	24	(74)	16	(50)
Directors (N = 97)	41	(40)	31	(30)	25	(24)	3	(3)
Totals	33.5	(138)	29.5	(122)	24	(98)	13	(53)

Legal Licensing Level for  
School Psychologists

A total of 68% of the school psychologists and 71% of the directors of special education were of the opinion that school psychologists should be legally licensed at the school psychologist level (see Table 56).

TABLE 56.--Legal Licensing Level for School Psychologists.

Group	Consult. Psych.		Psych.		Psych. Exam.		School Psych.		Other		None	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 311)	2	(7)	17	(54)	8	(25)	68	(212)	2	(5)	3	(8)
Directors (N = 96)	3	(3)	14	(13)	10	(10)	71	(68)	1	(1)	1	(1)
Totals	2.5	(10)	16.5	(67)	9	(35)	69	(280)	1	(6)	2	(9)

Accountability for  
School Psychologists

As shown in Table 57, a total of 68% of the school psychologists and 89% of the directors of special education agreed or strongly agreed that school psychologists should be accountable according to specified behavioral objectives. Only 13% of the school psychologists strongly agreed that they should be held accountable according to specified behavioral objectives, whereas 41% of the directors of special education strongly agreed.

TABLE 57.--Accountability for School Psychologists.

Group	Strongly Agree		Agree		Disagree		Strongly Disagree	
	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 305)	13	(40)	54.5	(166)	21	(64)	11.5	(35)
Directors (N = 96)	41	(39)	48	(46)	10	(10)	1	(1)
Totals	20	(79)	53	(212)	18	(74)	9	(36)

Minimal Degree for  
School Psychologists

The school psychologists and directors of special education were in very close agreement concerning the minimal degree for school psychologists. The majority (68.4% for school psychologists and 67% for directors of special education) perceived that the school psychologist should ideally have at least a M.A. or M.S. degree (see Table 58).

TABLE 58.--Minimal Degree for School Psychologists.

Group	B.A. or B.S.		M.A. or M.S.		Ed.S		Ed.D		Ph.D	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 311)	1.3	(4)	68.4	(213)	27	(84)	1	(3)	2.3	(7)
Directors (N = 97)	3	(3)	67	(65)	27	(26)	1	(1)	2	(2)
Totals	2	(7)	68	(278)	27	(110)	1	(4)	2	(9)

Use of Paraprofessionals by  
the School Psychologist

Approximately 60% of both school psychologists and directors of special education agreed or strongly agreed that trained paraprofessional aides should be utilized when appropriate in the administration of psychological tests (see Table 59).

TABLE 59.--Use of Paraprofessionals by the School Psychologist.

Group	Strongly Agree		Agree		Disagree		Strongly Disagree	
	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 315)	20.3	(64)	39.4	(124)	25	(79)	15.3	(48)
Directors (N = 96)	19	(18)	42	(40)	30	(29)	9	(9)
Totals	20	(82)	40	(164)	26	(108)	14	(57)

Professional Affiliations for  
School Psychologists (Respondents:  
School Psychologists only)

As shown in Table 60, most of the negative feelings concerning affiliation with a professional organization were reserved for the education associations at the national, state, and local levels. The most positive feelings were reserved for the Michigan Association of School Psychologists as indicated by a total of 90% of the school psychologists who suggested that they must or should belong. A total of 71% of the school psychologists suggested that they must or should belong to the National Association of School Psychologists. Approximately half of the school psychologists thought that they "may belong" to the Michigan Psychological Association (53%), Council for

Exceptional Children (53%), and Division 16 of the American Psychological Association (52%). On a national level school psychologists in Michigan preferred the National Association of School Psychologists to Division 16 of the American Psychological Association.

TABLE 60.--Professional Affiliations for School Psychologists (by percentage of psychologists).

Group	N	Must Belong %	Should Belong %	May Belong %	Should Not Belong %	Must Not Belong %
CEC <sup>1</sup>	303	6	41	53	-	-
NEA	298	4	14	70	10	2
MEA	299	5	14	68	10	3
Local	298	8.3	20	58.4	11	2.3
MASP	305	52	38	9.5	.5	-
MPA	300	12	33	53	2	-
NASP	300	25	46	29	-	-
Div. 16	299	11	36	52	1	-

- <sup>1</sup>CEC - Council for Exceptional Children  
 NEA - National Education Association  
 MEA - Michigan Education Association  
 Local - Local Education Association  
 MASP - Michigan Association of School Psychologists  
 MPA - Michigan Psychological Association  
 NASP - National Association of School Psychologists  
 Div. 16 - Division 16 - American Psychological Association

#### "Private Practice" for School Psychologists

There was a difference of opinion on this item expressed by school psychologists and directors of special education (see Table 61). A majority (81%) of the school psychologists either agreed or strongly agreed that they should be free to engage in "private practice."

However, a majority (60%) of the directors of special education either disagreed or strongly disagreed that school psychologists should be free to engage in "private practice."

TABLE 61.--"Private Practice" for School Psychologists.

Group	Strongly Agree		Agree		Disagree		Strongly Disagree	
	%	(N)	%	(N)	%	(N)	%	(N)
Psychologists (N = 311)	29	(91)	52	(161)	14	(44)	5	(15)
Directors (N = 96)	5	(5)	35	(34)	40	(38)	20	(19)

Professional Improvement of  
School Psychologists by Means  
of Four Activities

As shown in Table 62, the majority of school psychologists and directors of special education were in general agreement that school psychologists "must" or "should" engage in these activities in order to improve professionally. The reading of professional journals by school psychologists was strongly recommended as a "must" activity by 68.6% of the school psychologists and 61.5% of the directors of special education. A total of 95.6% of the school psychologists and 91.7% of the directors of special education perceived that school psychologists "must" or "should" read professional journals.

There was a slight difference of opinion between the two groups with respect to attendance at conferences. A total of 52.7% of the school psychologists perceived that school psychologists "must" attend conferences as compared to only 21% of the directors. A total of



TABLE 62.--Professional Improvement of School Psychologists by Means of Four Activities as Perceived by the Respondents (In Percent).

	Must Do		Should Do		May Do		Should Not Do		Must Not Do	
	Psych.	Dir.	Psych.	Dir.	Psych.	Dir.	Psych.	Dir.	Psych.	Dir.
Visit School Programs	25	16.7	49.4	59.3	25.6	23	-	-	-	1
Enroll in University Courses	14	11.5	48.1	50	36.3	36.5	.3	-	1.3	2
Attend Conferences	52.7	21	39	49	8	28	.3	1	-	1
Read Professional Journals	68.6	61.5	27	30.2	4.1	5.2	.3	2.1	-	1

N (School Psychologists) = 314

N (Directors of Special Education) = 96

91.7% of school psychologists perceived that school psychologists "must" or "should" attend conferences as compared to 70% of the directors.

Approximately 50% of both respondent groups perceived that school psychologists "should" visit school programs in other school districts and enroll in university courses.

Of the four activities, enrolling in university courses was the least emphasized activity with more than one-third of both respondent groups stating that school psychologists "may" do this.

Professional Areas in Which School Psychologists  
Need to Improve Skills and Competencies  
in View of Changes Which are  
Taking Place in Their  
Role

This was the only open-ended question in the questionnaire. A total of 959 responses were received from the respondents (770 responses from 277 school psychologists and 189 responses from 74 directors of special education). These responses were summarized and organized into specific categories which preserved the major thrust or emphasis of each response. Although there was some overlap in the categories, this was considered necessary in order to preserve all the essential ideas which were expressed (see Tables 63 and 64).

The school psychologists placed the most emphasis upon the need to improve their competencies in the area of diagnostic testing. A total of 237 responses out of 770 (31%) dealt with diagnosis. In the diagnostic area considerable emphasis was placed upon the diagnosis of learning disabilities and clinical or personality diagnosis. School psychologists also placed great emphasis upon improving skills in

counseling and/or psychotherapy with children and psycho-educational planning.

The directors of special education placed the most emphasis upon school psychologists becoming more knowledgeable in curriculum, materials, and teaching techniques. Diagnostic testing was also stressed with a special emphasis upon improving competencies in the diagnosis of learning disabilities. Directors of special education placed considerable importance upon the need for school psychologists to improve skills in psycho-educational planning, communicating and consulting with teachers, public relations, team approach, understandable reports, and knowledge of school procedures, the classroom, and the teacher's role. The fact that approximately a third of the school psychologists in Michigan have no teaching experience may be responsible for this lack of awareness of the teacher's concerns as perceived by the directors of special education.

TABLE 63.--Professional Areas in Which School Psychologists Need to Improve Skills and Competencies as Perceived by School Psychologists (Total responses: 770).

Professional Area	Number of Responses
Diagnostic Testing	237
Diagnosis and remediation of learning disabilities (98)	
Clinical diagnosis (68)	
- Diagnosis of emotional disturbance (23)	
- Projective test interpretation (28)	
- Personality (affective) diagnosis (17)	
Pre-school (19)	
General diagnostic skills (15)	
Reading (10)	
Other types of handicaps (27)	

TABLE 63.--(cont'd.)

Professional Area	Number of Responses
Counseling and/or psychotherapy with children	92
Psycho-educational Planning and educational prescriptions	83
Behavior management skills	49
Behavior modification (29)	
Behavior management consultation (21)	
Teacher Consultation and Inservice	47
Understanding of school curriculum, resources, materials	42
Parent Consultation	35
Theoretical understandings	32
(Emphasis on learning theory, personality theory, and child development)	
Research and research methods	22
Training in human relationships	16
(Emphasis on interpersonal skills, public relations, listening and influencing others)	
Psychology training programs should stress the practical and applied aspects of the role	14
Administrative understandings	13
Community-school relations	9
Political-legal understandings	7
Defining and writing behavioral objectives	6
Group-work skills	6
Clinical experiences with emotionally disturbed children	5
Other	55

TABLE 64.--Professional Areas in Which School Psychologists Need to Improve Skills and Competencies as Perceived by Directors of Special Education (Total responses: 189).

Professional Area	Number of Responses
Knowledge of curriculum, materials, and teaching techniques	25
Diagnostic testing General (3); Personality (2); Gifted (1); Psycho-motor (1); Perceptual handicaps (1); Reading (2); Pre-school (2); Emotional disturbance (2); Learning disabilities (9)	23
Psycho-educational planning and educational prescriptions	22
Public relations and staff communication; interpersonal skills; team approach and cooperation; make reports more understandable	18
Teacher consulting and inservice	16
Teaching experience; knowledge of school procedures; awareness and understanding of the classroom and the teacher's role	14
Counseling and/or psychotherapy with children	14
Parent counseling	12
Theoretical understandings Personality theory (1); Learning theory (2) Child development (2); Emotional and affective understandings (2); Physiology (1); Organic problems (1)	9
Behavior management skills	8
Research	5
Improved understanding of all areas of exceptionality	4
Other	19

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Introduction

This chapter consists of five parts: a brief review of the study, major findings, discussion, recommendations, and implications for future research.

#### Review of the Study

This study was concerned with various activities making up an ideal role of the school psychologist in Michigan as perceived by school psychologists and directors of special education. Recent court litigation, changes in special education philosophy, and recent legislation in Michigan including Mandatory Special Education (1971) and Comprehensive School Psychological Services (1973) have implications for change and expansion of the role of the school psychologist. Although many writers have suggested various changes in the activities of the school psychologist, little research has actually been carried out to study these various activities and their relative importance in the role of the school psychologist. Previous research studies concerning the role of the school psychologist in Michigan have generally been demographic in emphasis and have failed to adequately describe the various activities in the role of the school psychologist.

To obtain the necessary data a questionnaire was designed to

elicit responses from both school psychologists and directors of special education concerning the relative importance of eight major activities and fifty-five specific activities included in the ideal role of the school psychologist. The school psychologists returned 318 questionnaires (78%) while directors of special education returned 99 questionnaires (66%). The univariate analysis of variance was used to determine whether the amount of teaching experience, the amount of professional experience as either a school psychologist or director of special education, and the type and size of school district had any effect upon the role perceptions of the respondents on each of the eight major activities. The Chi-square Test of Homogeneity was used to test the distributional agreement of school psychologists and directors of special education on each of the fifty-five specific activities. The Kendall Coefficient of Concordance was used to compare the perceived rankings of the eight major activities in the present role, the ideal role, the relative time allotment for each activity, and the relative adequacy of preparation for the activities. The types of children needing psychological services, the settings for school psychological activities, and the professional needs of the school psychologist were studied. The respondents were also asked to list professional areas in which they perceived the school psychologists needing to improve their competencies.

### Major Findings

1. There was a statistically significant difference between the school psychologists and directors of special education on their

perceptions of the ideal role of the school psychologist on six of the eight major activities. The school psychologists, as compared to the directors of special education, had a slight tendency to perceive the following activities as more important:

- Diagnosis
- Psycho-Educational Planning
- Child Therapy
- Community Relationships
- Program Consultation
- Administration of Special Education Programs

In general the differences in mean scores, while statistically significant, were small and not considered very meaningful. Parent Consultation and Research were perceived as equally important by both respondent groups.

2. Amount of teaching experience had no effect upon how the school psychologists and directors of special education perceived the ideal role of the school psychologist on each of the eight major activities.

3. Amount of professional experience as either a school psychologist or director of special education had no effect upon how the school psychologists and directors of special education perceived the ideal role of the school psychologist on six of the eight major activities. The perceived importance of Child Therapy and Community Relationships increased slightly as the amount of professional experience of both respondent groups increased.

4. The type of school district (local or intermediate) in which the respondents were employed did not have an effect upon how the respondents perceived the ideal role of the school psychologist on six



of the eight major activities. There was a slight tendency for respondents from local districts as compared to respondents from intermediate districts to perceive Diagnosis and Psycho-Educational Planning as more important.

5. The size of the school district had no effect upon the perception of the eight major activities in the ideal role of the school psychologist.

6. There was a very high correlation between how the school psychologists and directors of special education ranked the eight major activities in the ideal role of the school psychologist according to relative importance. The rankings by relative importance of these eight major activities in the ideal role, based upon the mean rankings of both respondent groups, are given in rank order below.

- Diagnosis
- Psycho-Educational Planning
- Parent Consultation
- Child Therapy
- School Program Consultation
- Research
- Community Relationships
- Administration of Special Education Programs

7. Diagnosis and Psycho-Educational Planning were perceived by school psychologists and directors of special education as deserving the major portion of the school psychologist's time.

8. The eight major activities, as ranked by the respondents according to both the school psychologists' relative adequacy of preparation in each activity and the relative allotment of time to

spend in each activity, had rankings identical to the rankings of the major activities in the ideal role of the school psychologist.

9. There was a very high correlation between the rankings of the eight major activities in the present role and the rankings of these activities in the ideal role of the school psychologist as perceived by both respondent groups.

10. The majority of both the school psychologists and directors of special education desired that the school psychologist provide professional services to all children. The mentally retarded child was considered the most important child for the school psychologist to serve followed by the learning disabled, the emotionally disturbed, and the multiply handicapped.

11. The majority of both respondent groups were in agreement that a school psychologist should serve a student population of 2500 or less.

12. The majority of both respondent groups were in agreement that school psychologists "must" or "should" provide service to regular school programs, special education programs housed in the regular school, pre-school programs, and special education schools or facilities serving day students.

13. A majority of school psychologists desired a director or coordinator of psychological services to be their immediate supervisor, whereas a majority of the directors of special education desired that they themselves be the school psychologists' supervisors.

14. A majority of both respondent groups perceived that school psychologists should have some teaching experience.

15. A majority of both respondent groups perceived that school psychologists should have a teaching certificate.

16. A majority of both respondent groups perceived that school psychologists should be legally certified or licensed at a "school psychologist" level.

17. A majority of both respondent groups perceived that the school psychologist should be held accountable according to specified behavioral objectives.

18. A majority of both respondent groups perceived that the school psychologist should have at least a M.A. degree.

19. A majority of both respondent groups agreed that trained paraprofessional aides should be utilized when appropriate in the administration of psychological tests.

20. A majority of the school psychologists agreed that they should be free to engage in "private practice" whereas a majority of the directors of special education disagreed with this position.

21. Regarding professional affiliations, school psychologists had the most positive feelings toward the Michigan Association of School Psychologists and the National Association of School Psychologists.

22. The majority of school psychologists and directors of special education were in general agreement that school psychologists "must" or "should" engage in the visitation of other school programs, enroll in university courses, attend conferences, and read professional journals.

23. The school psychologists placed emphasis upon the need to improve their competencies in the area of diagnostic testing with importance placed upon the diagnosis of learning disabilities and personality-emotional disabilities. The directors of special education placed emphasis upon school psychologists becoming more knowledgeable in curriculum materials and teaching techniques. Diagnostic testing and evaluation of learning disabilities were also stressed by directors of special education. The need for school psychologists to improve their communications and public relations skills with teachers and the need to be sensitive to the teachers' concerns were considered important by the directors of special education.

### Discussion

The ideal role of the school psychologist in this study is not a role which can be called ideal in the sense of its being perfect. It is important to understand that this is a role as perceived by only school psychologists and directors of special education, and it is limited to the preferences of these two groups of respondents. The perceptions of teachers, principals, general administrators, parents, and other educators are not included in this study. Since it is a perceived role limited to the preferences of two groups, the results of

this study should be understood and interpreted with this perspective in mind.

The ideal role of the school psychologist was perceived by school psychologists and directors of special education as a multifaceted role consisting of a variety of activities. It was evident, however, that Diagnosis and Psycho-Educational Planning were perceived as two of the more important activities of the school psychologist in the ideal role and that a majority of the school psychologist's time should be spent in these activities. Many writers and researchers have suggested that the strong emphasis on diagnosis which existed for many years should be changed and other activities should be substituted to take its place. However, this study indicated that school psychologists and directors of special education in Michigan perceived Diagnosis as very important but that it should be modified to serve all children with a variety of disabilities. There was a perceived emphasis on diagnosing children with learning disabilities, emotional problems, and multiple handicaps. There was also a perceived emphasis upon psycho-educational planning which may require that school psychologists have a knowledge of curriculum and teaching techniques. In sum, it appeared that the ideal role of the school psychologist was perceived as a diagnostic-prescriptive role rather than a clinical-diagnostic role. It was perceived as a role in which school psychologists no longer merely diagnose mental retardation and determine eligibility for special education classrooms, but rather as a role in which school psychologists diagnose various problems with an emphasis on the prescription of various educational techniques and procedures. It was

perceived as a role which is child-centered and behavior change oriented with an emphasis on involvement of parents and teachers.

The differences in role perception between the school psychologists and directors of special education, although statistically significant, were small and should not be considered very meaningful. The fact that 22% of the directors of special education had experience either as a school diagnostician or school psychologist may have been a contributing factor to these small differences in that this experience as a school psychologist may have sensitized some of the directors of special education to perceive the role in a similar way to the perceptions of the school psychologists. Also, the small differences in role perception between the two respondent groups may indicate their general agreement with the educational and psychological needs of children. It also may indicate that school psychologists and directors of special education have been communicating with each other and sharing common ideas.

The perceived importance of Child Therapy and Community Relationships increased as the amount of professional experience of both respondent groups increased. This may indicate that as school psychologists and directors of special education gained experience they perceived a need for the school psychologist to have closer relationships with both children in school and the community at large.

There was a slight tendency for respondents from local districts as compared to respondents from intermediate districts to place more importance upon Diagnosis and Psycho-Educational Planning. This particular effect may be due to the fact that respondents from local

school districts may be closer to the needs of children and teachers, or perhaps they are under more immediate pressure to provide these services.

In a general way, it did not appear that the amount of teaching experience, amount of professional experience as either a school psychologist or director of special education, and type and size of school district had any appreciable effect upon how the school psychologists and directors of special education perceived the activities of the school psychologist in the ideal role. Since there also appeared to be little meaningful difference in role perception between the two respondent groups, there is the encouraging prospect for agreement regarding the direction in which the school psychology program is proceeding.

The ideal role was perceived as very similar to the perceptions of the present role, and it is therefore possible that the role may not change very much. It is speculated that the reason for this similarity in perception is that the school psychologists may already be engaged in various aspects of what the school psychologists and directors of special education perceived to be the ideal role of the school psychologist. There was some indication that in the ideal role of the school psychologist, in comparison to the present role, there may be more emphasis placed upon psycho-educational planning, child therapy, and research.

The ideal role of the school psychologist was perceived to have a strong special education orientation in that special education programs were considered more important to serve than other types of

programs such as regular school programs, summer school programs, residential or institutional programs. Mental retardation continued to be the disability area which was perceived by the respondents as the more important one to which the school psychologist ought to provide psychological service.

A majority of both respondent groups were in agreement that a school psychologist should serve a student population of 2500 or less. It should be noted that the Administrative Code Committee on Special Education of the Michigan Department of Education recommended authorization of one approved special education diagnostician for each 2500 pupils in attendance in order to "facilitate appropriate interaction of the diagnosticians with all special education programs and services, and to permit reasonable utilization of the diagnosticians for program research and evaluation . . . ." (1969, p. 23)

There were some differences, however, between the school psychologists and directors of special education. They did not agree on who should supervise school psychologists and to what extent school psychologists should engage in "private practice." There was also a slight tendency for directors of special education in comparison to school psychologists to place more emphasis upon school psychologists being accountable according to specified behavioral objectives.

The only one of the fifty-five activities having a significant chi-square which was rated as more important by the directors of special education than by school psychologists reads as follows: "Give a written psychological report to the parents concerning the psychological and educational needs of their child." A total of 25% of the school



psychologists as compared to 38% of the directors of special education perceived that the school psychologist "must" or "should" perform this activity. This may indicate that the directors of special education in comparison to the school psychologists have more concern for due process considerations and parent involvement in psycho-educational planning. It also may indicate that the school psychologists are not predisposed to sharing their confidential psychological findings with parents.

Regarding professional affiliations of school psychologists, the school psychologists gave a higher priority to psychological associations than to education associations. The large majority of school psychologists indicated a greater preference for the National Association of School Psychologists than for Division 16 of the American Psychological Association. If the Michigan Association of School Psychologists desire an affiliation with a national psychological organization, it should keep this point in mind.

#### Recommendations

Based upon both information reported in this study and upon current trends and happenings in the field of education, the following recommendations are suggested.

1. School psychologists should provide comprehensive psychological services to all children. The approach should be child centered and behavior change oriented.

2. School psychologists should become involved in the process of psycho-educational planning, the writing of educational prescriptions, and consultation with teachers.

3. School psychologists should strive to strengthen their image in the schools by means of effective public relations and communication. The school psychologist should become more sensitive to the needs of the school program. He needs to become an effective member of a team of professionals who desire to educate children.

4. The school psychologist should involve parents in the diagnostic-prescriptive process and consult with them when necessary.

5. State-wide inservice meetings sponsored either by the Michigan Department of Education, the Michigan Association of School Psychologists, or other groups should emphasize the development of diagnostic skills as they pertain to learning disabilities, emotional disturbances, and multiple handicaps. Skills of the school psychologist in the use of educational materials, techniques for prescription, and psycho-educational planning need to be upgraded. The growing interest in child therapy needs to be explored. How to communicate and consult with parents effectively needs to be studied.

6. The present ratio of one school psychologist for every 4000 school children should be reduced to a level of 2500 school children for every school psychologist.

7. A dialogue should be started between school psychologists and directors of special education to explore problems of mutual concern. The concerns regarding supervision, "private practice" by school psychologists, accountability by means of performance objectives, and the use of confidential psychological information with parents should

be discussed.

8. University training programs should be oriented to training professional school psychologists in the skills and competencies needed to provide comprehensive psychological services.

- A. There should be an emphasis upon the diagnosis of various disabilities including the mentally retarded, the emotionally disturbed, the learning disabled, the multiply handicapped and others.
- B. There should be an emphasis upon the processes of learning and teaching. The school psychologist in training should become familiar with the development of curriculum, the use of educational materials and techniques, and psycho-educational prescription.
- C. School psychological internships should include attendance at psycho-educational planning meetings, parent conferences, and observations in the classroom.

9. The school psychologists as a professional group should recommend legislation to amend the state licensing act for levels of psychologists so that "school psychologists" can become one of the legally recognized levels.

#### Implications for Future Research

Additional research is necessary in the following areas:

- 1. Although teaching experience, professional experience, and type and size of school district had very little effect upon the perception

of the role of the school psychologist, it cannot be stated with any confidence that these variables have no effect upon the role as it is actually practiced. Research is recommended to explore this area.

2. Both school psychologists and directors of special education stressed the importance of communicating and consulting with teachers and planning prescriptive educational programs for children. Research should be directed toward finding how the school psychologist can be most effective in this particular activity.

3. Since school psychologists perceived an increasing need for child therapy, there should be an effort expended to define and develop the concept, to study its feasibility and possible effectiveness, and to outline the necessary responsibilities involved.

4. In view of the interest expressed in this study for parent counseling and in view of due process considerations, it is recommended that models for relating with parents be developed and that research be designed to find effective ways to communicate and consult with parents.

5. Studies should be undertaken to explore how paraprofessionals can be most effectively used in complementing the role of the school psychologist.

6. Studies should be made to obtain an understanding of the role of the school psychologist as perceived by teachers, general administrators, principals, parents, and other educators.

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## APPENDIX A

### EIGHT MAJOR AND FIFTY-FIVE SPECIFIC ACTIVITIES OF THE SCHOOL PSYCHOLOGIST

## APPENDIX A

### EIGHT MAJOR AND FIFTY-FIVE SPECIFIC ACTIVITIES OF THE SCHOOL PSYCHOLOGIST

#### I. Diagnostic Testing and Evaluation

The school psychologist makes a diagnostic study of a child by means of various measurement instruments or techniques to determine the reasons for the child's difficulties in school.

##### A. Types of problems to diagnose and evaluate

1. Intellectual and cognitive difficulties
2. Perceptual-motor problems
3. Learning disabilities
4. Affective and emotional disorders
5. Social and family problems

##### B. Means of diagnosis

1. Administer and score individual standardized tests
2. Administer and score individual projective or non-standardized tests
3. Discuss the child's problem with the teacher
4. Observe the child in the classroom or real life situation
5. Study the social case history of the child

## II. Teacher Consultation and Psycho-Educational Planning for Individual Children

The school psychologist consults with teachers and school personnel in planning a child's school program which is unique and specific to that individual and which is based upon sound psychological and educational principles.

### A. Functions of the school psychologist in Psycho-Educational Planning

1. Present and interpret the numerical scores of tests to educational personnel
2. Present and interpret the specific diagnoses of children's problems to educational personnel
3. Determine the eligibility of children for one of the types of available special education programs
4. Make suggestions to educational personnel for behavior management and/or Behavior Modification of children with adjustment problems
5. Prescribe specific curriculum materials to remediate the educational and learning problems of children
6. Prescribe the use of techniques to remediate problems of visual-motor coordination in children

## III. Psychotherapy and/or Counseling with Children

The school psychologist gives direct supportive help to the child in an attempt to improve or change the child's behavior so he can adapt himself more readily to a school learning environment.

### A. Techniques of child therapy intervention

1. Conduct individual or group sessions with children in a therapeutic effort to bring about emotional, attitudinal, and/or behavioral change

2. Engage in educational and/or vocational counseling with students
3. Remediate learning problems by directly tutoring children
4. Engage directly with children in recreational therapy

#### IV. Parent Consultation

The school psychologist helps the parents understand the psychological and educational needs of their children.

##### A. Methods of carrying out parent consultation

1. Make home visitations to consult with parents
2. Make presentations to P.T.A. groups
3. Include parents in school Psycho-Educational planning
4. Give a written psychological report to the parents

#### V. Community Relationships

The school psychologist works within the community in an educational and informative manner and provides a liaison between the school and the community regarding programs for handicapped children.

##### A. Community concerns

1. Help to develop community mental health programs
2. Help to develop Sheltered Workshop programs
3. Help to develop recreational activities for the handicapped in the community outside of the school environment
4. Improve the level of public awareness of the educational, psychological, and physical needs of the handicapped
5. Help to develop employment opportunities for the handicapped



## B. Methods of developing community relationships

1. Serve on community boards which are concerned with the needs of the handicapped
2. Cooperate with several school districts to solve a larger community-wide or count-wide educational problem
3. Make presentations to civic organizations, community service clubs, and church groups
4. Cooperate with and utilize the services of the various psychological and educational agencies available in the community

## VI. School Curriculum and Program Consultation

In a variety of ways the school psychologist provides recommendations and information regarding special needs, curriculum, and programming in the school district in order to improve the quality of the educational program and bring about educational change.

### A. School Program concerns

1. Recommend needed changes in the physical structure and equipment of the school plant or playground
2. Design alternative programs for children such as resource rooms and/or diagnostic learning centers
3. Recommend needed changes in the curriculum of educational programs
4. Recommend needed changes in the teacher staffing of educational programs
5. Disseminate information regarding how sociological and economic conditions can affect children's learning
6. Improve the educational opportunities of ethnic minority groups within the school program
7. Design, submit, and evaluate proposals for educational programs funded by federal and state agencies

B. Methods which the school psychologist can utilize to promote educational program recommendations and disseminate ideas and information

1. Write political representatives concerning needed educational legislation
2. Work as a member of a committee that is exploring a particular educational problem in the school district
3. Consult with administrators regarding ways to improve educational programs
4. Provide inservice meetings for teachers
5. Attend school board meetings to present new ideas to board members

#### VII. Administration of Special Education Programs

The school psychologist coordinates special education programs, supervises personnel, and makes special arrangements such as transportation and scheduling.

- A. Administrative functions which the school psychologist may perform
1. Make transportation arrangements for exceptional children
  2. Supervise special education personnel
  3. Participate in recruitment of staff for special education programs
  4. Help to formulate special education administrative policy
  5. Supervise one of the specific educational programs within the total special education program
  6. Coordinate a group achievement testing program for the general educational program

### VIII. Research

The school psychologist by means of various techniques seeks to gather information, answer questions, or solve problems which confront education as it attempts to meet the psychological and educational needs of children in a school setting.

#### A. Research Techniques

1. Use informal information gathering techniques such as discussions or interviews with teachers, administrators, and/or parents
2. Review and summarize pertinent professional literature
3. Design and use surveys
4. Design and carry out experimental studies

## APPENDIX B

### QUESTIONNAIRE USED IN THE STUDY

APPENDIX B

QUESTIONNAIRE USED IN THE STUDY

S U R V E Y

THE ROLE OF THE SCHOOL PSYCHOLOGIST IN MICHIGAN

INSTRUCTIONS

Please take time to read each item carefully and respond as completely as possible.

Ignore all numbers in the left hand column. These numbers will be used for data processing.

Please check the appropriate boxes or fill in the blanks provided.

Please return by February 28, 1973

to

Nicholas Fridsma  
301 F Erickson Hall  
College of Education  
Michigan State University  
East Lansing, Michigan  
48823

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Please fill in your name and address below and check here if you desire the results of this study mailed to you.

NAME \_\_\_\_\_  
Last First Middle Initial  
ADDRESS \_\_\_\_\_  
Street  
\_\_\_\_\_  
City State Zip

I GENERAL INFORMATION: DIRECTORS OF SPECIAL EDUCATION

- 5 1. Age \_\_\_\_\_
2. Sex \_\_\_\_\_ 1. Male \_\_\_\_\_ 2. Female (Check)
3. Type of district in which you are employed (Check one)  
       \_\_\_\_\_ 1. Local  
       \_\_\_\_\_ 2. Intermediate  
       \_\_\_\_\_ 3. Other setting (Specify) \_\_\_\_\_
4. Total public school student population in the district in which you are employed \_\_\_\_\_
5. How many years of experience as a Director of Special Education do you have? \_\_\_\_\_
6. Highest degree earned (Check one): \_\_\_\_\_ 1. BS or BA; \_\_\_\_\_ 2. MS or MA;  
       \_\_\_\_\_ 3. Ed. S.; \_\_\_\_\_ 4. Ed. D.; \_\_\_\_\_ 5. Ph. D.
7. What type of approval do you have as a Director of Special Education from the State Department of Education? (Check one)  
       \_\_\_\_\_ 1. Temporary  
       \_\_\_\_\_ 2. Permanent  
       \_\_\_\_\_ 3. "Grandfather"  
       \_\_\_\_\_ 4. Not approved
8. Teacher Certification
- |                                     |  |
|-------------------------------------|--|
| A. Type (Check one)                 | B. Level (Check one)                   |
| _____ 1. Provisional                | _____ 1. Elementary                    |
| _____ 2. Permanent                  | _____ 2. Secondary                     |
| _____ 3. Life                       | _____ 3. Both Elementary and Secondary |
| _____ 4. Not certified as a teacher | _____ 4. None of the above             |
- C. If you have approval in any area(s) of special education, please state the area(s). \_\_\_\_\_
- D. How many years of teaching experience do you have? \_\_\_\_\_
9. In your professional educational career have you ever been employed as a School Diagnostician or School Psychologist?  
       \_\_\_\_\_ 1. Yes  
       \_\_\_\_\_ 2. No

I GENERAL INFORMATION: SCHOOL PSYCHOLOGISTS

- 5 1. Age \_\_\_\_\_
2. Sex \_\_\_\_\_ 1. Male \_\_\_\_\_ 2. Female (Check)
3. Type of district in which you are employed (Check one)  
       \_\_\_\_\_ 1. Local  
       \_\_\_\_\_ 2. Intermediate  
       \_\_\_\_\_ 3. Other setting (Specify) \_\_\_\_\_
4. Total public school student population in the district in which you are employed \_\_\_\_\_
5. How many years of experience as a School Psychologist do you have? \_\_\_\_\_
6. Highest degree earned (Check one): \_\_\_\_\_ 1. BS or BA; \_\_\_\_\_ 2. MS or MA;  
       \_\_\_\_\_ 3. Ed.S; \_\_\_\_\_ 4. Ed.D; \_\_\_\_\_ 5. Ph.D
7. What type of approval do you have as a School Diagnostician? (Check one)  
       \_\_\_\_\_ 1. Temporary  
       \_\_\_\_\_ 2. Permanent
8. Teacher Certification
- |                                     |  |
|-------------------------------------|--|
| A. Type (Check one)                 | B. Level (Check one)                   |
| _____ 1. Provisional                | _____ 1. Elementary                    |
| _____ 2. Permanent                  | _____ 2. Secondary                     |
| _____ 3. Life                       | _____ 3. Both Elementary and Secondary |
| _____ 4. Not certified as a teacher | _____ 4. None of the above             |
- C. If you have approval in any area(s) of special education, please state the area(s). \_\_\_\_\_
- 15 D. How many years of teaching experience do you have? \_\_\_\_\_
9. According to the Psychologist Registration Act, at what level are you certified?  
       \_\_\_\_\_ 1. Consulting Psychologist  
       \_\_\_\_\_ 2. Psychologist  
       \_\_\_\_\_ 3. Psychological Examiner  
       \_\_\_\_\_ 4. None of the above
- 17 10. To whom are you most immediately responsible? (Check one only)  
       \_\_\_\_\_ 1. Director of Pupil Personnel  
       \_\_\_\_\_ 2. Director of Special Education  
       \_\_\_\_\_ 3. Superintendent  
       \_\_\_\_\_ 4. Director or Coordinator of Psychological Services  
       \_\_\_\_\_ 5. Other (Specify) \_\_\_\_\_
11. Where did you receive your graduate training in School Psychology?  
       \_\_\_\_\_ 1. University (Specify) \_\_\_\_\_  
       \_\_\_\_\_ 2. University Department (Specify) \_\_\_\_\_
- 20

## II ACTIVITIES OF THE SCHOOL PSYCHOLOGIST

### Instructions

The next 55 items beginning on the following page are specific activities which may be performed by School Psychologists. Please check the appropriate box for each activity to specify how important you perceive it to be ideally for the School Psychologist to perform that activity. Please check one of the boxes for each activity according to the following relative importance scale:

#### Must Perform:

The School Psychologist MUST perform this activity. It is a major and essential function of the highest priority.

#### Should Perform:

The School Psychologist SHOULD perform this activity. It is a meaningful, significant, and desirable function of medium priority.

#### May Perform:

The School Psychologist MAY perform this activity if he wishes. It is a minor function of low priority but it is permissible and acceptable.

#### Should Not Perform:

The School Psychologist SHOULD NOT perform this activity. It is not a desirable or meaningful function for the School Psychologist to perform.

#### Must Not Perform

The School Psychologist MUST NOT perform this activity. It is not an essential or legitimate function for the School Psychologist to perform.



Remember: The basic question you are answering is: What ideally Should Be the appropriate activities of the School Psychologist? Check one of the boxes on the scale for each activity to specify how important you perceive it should be for a School Psychologist in his ideal role to perform that activity.

Must Perform	Should Perform	May Perform	Should Not Perform	Must Not Perform
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1. Help to develop recreational activities for the handicapped in the community outside of the school environment
2. Observe the child in the classroom or real life situation as one of the means of diagnosis and evaluation
3. Present and interpret the numerical scores of tests to educational personnel
4. Write political representatives concerning needed educational legislation
5. Recommend needed changes in the teacher staffing of education programs
6. Help to develop community mental health programs
7. Perform research by designing and carrying out experimental studies
8. Diagnose and evaluate the affective and emotional disorders of children
9. Improve the educational opportunities of ethnic minority groups within the school program
10. Coordinate a group achievement testing program for the general educational program
11. Determine the eligibility of children for one of the types of available special education programs
12. Improve the level of public awareness of the needs of the handicapped
13. Diagnose and evaluate the social and family problems of children
14. Include parents in school psycho-educational planning to discuss the psychological and educational needs of their child
15. Diagnose and evaluate the learning disabilities of children
16. Disseminate information regarding how sociological and economic conditions can affect children's learning
17. Present and interpret the specific diagnoses of children's problems to educational personnel
18. Engage in educational and/or vocational counseling with students
19. Give a written psychological report to the parents concerning the psychological and educational needs of their child

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		Must Perform	Should Perform	May Perform	Should Not Perform	Must Not Perform
40	20. Engage directly with children in recreational therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	21. Supervise special education personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	22. Conduct individual or group sessions with children in a therapeutic effort to bring about emotional, attitudinal, and/or behavioral change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	23. Help to develop sheltered workshop programs in the community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	24. Make presentations to civic organizations, community service clubs, and church groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	25. Perform research by designing and using surveys	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	26. Participate in recruitment of staff for special education programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	27. Make home visitations to consult with parents regarding the psychological and educational needs of their child	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	28. Cooperate with several school districts to solve a larger community-wide or county-wide educational problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	29. Serve on community boards which are concerned with the needs of the handicapped	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	30. Prescribe the use of techniques to remediate problems of visual-motor coordination in children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	31. Make transportation arrangements for exceptional children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	32. Study the social case history of the child as one of the means of diagnosis and evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	33. Perform research by using informal information gathering techniques such as discussions or interviews with teachers, administrators, and/or parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	34. Design alternative programs for exceptional children such as resource rooms and/or diagnostic learning centers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	35. Recommend needed changes in the physical structure and equipment of the school plant or playground	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	36. Remediate learning problems by directly tutoring children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	37. Recommend needed changes in the curriculum of education programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	38. Diagnose and evaluate the intellectual and cognitive difficulties of children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
59	39. Administer and score individual projective or non-standardized tests as one of the means of diagnosis and evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

75

### III RELATIVE IMPORTANCE OF ACTIVITIES

Please rank the following activities according to their importance to the School Psychologist in his Present Role (as it is now) in column 1 and according to their importance in his Ideal Role (as it should be) in column 2. Please rank your perceptions of their relative importance to School Psychologists in EACH of the eight activities by giving a (1) to the activity which is MOST important to perform, a (2) to the activity next most important to perform, then a (3), a (4), etc., etc., until finally giving an (8) to the least important activity to perform. Please do this two times, once for the relative importance in his Present Role in column 1 and again for the relative importance in his Ideal Role in column 2.

		<u>Present Role</u>	<u>Ideal Role</u>
10	1. Psychotherapy and/or counseling with children	_____	_____
	2. Teacher consultation and psycho-educational planning for individual children	_____	_____
	3. Diagnostic testing and evaluation	_____	_____
	4. Research	_____	_____
	5. Community relationships	_____	_____
	6. School curriculum and program consultation	_____	_____
	7. Parent consultation	_____	_____
41	8. Administration of Special Education Programs	_____	_____

### IV RELATIVE TIME ALLOTMENT OF ACTIVITIES

Please specify the percentage of professional time which you perceive as necessary for the School Psychologist to spend in each of the following activities in his ideal role.

	1. Psychotherapy and/or counseling with children	_____%
	2. Teacher consultation and psycho-educational planning for individual children	_____%
	3. Diagnostic testing and evaluation	_____%
	4. Research	_____%
	5. Community relationships	_____%
	6. School curriculum and program consultation	_____%
	7. Parent consultation	_____%
49	8. Administration of Special Education Programs	_____%
		100%

# V ADEQUACY OF PREPARATION FOR ACTIVITIES

To what extent are School Psychologists prepared to perform the following activities in the ideal role of the School Psychologist as you perceive it? Please rank your perceptions of the relative adequacy of preparation in each of the following eight activities by giving a (1) to the activity in which the School Psychologist is most adequately prepared, a (2) to the activity in which he is next most adequately prepared, then a (3), a (4), etc., etc., until finally giving an (8) to the activity in which he is least adequately prepared.

- 50
- \_\_\_\_\_ 1. Psychotherapy and/or counseling with children
  - \_\_\_\_\_ 2. Teacher consultation and psycho-educational planning for individual children
  - \_\_\_\_\_ 3. Diagnostic testing and evaluation
  - \_\_\_\_\_ 4. Research
  - \_\_\_\_\_ 5. Community relationships
  - \_\_\_\_\_ 6. School curriculum and program consultation
  - \_\_\_\_\_ 7. Parent consultation
  - \_\_\_\_\_ 8. Administration of Special Education Programs

# VI CHILDREN RECEIVING PROFESSIONAL PSYCHOLOGICAL SERVICES FROM THE SCHOOL PSYCHOLOGIST

According to your perceptions please indicate to what extent each of the children listed below should receive professional psychological services from the School Psychologist in his ideal role. The following code should be used: 1 - Must receive service; 2 - Should receive service; 3 - May receive service; 4 - Should Not receive service; 5 - Must Not receive service. Place the appropriate code number on the line next to each of the children listed.

- \_\_\_\_\_ 1. Normal child
- \_\_\_\_\_ 2. Gifted
- \_\_\_\_\_ 3. Visually handicapped
- \_\_\_\_\_ 4. Deaf and hard of hearing
- \_\_\_\_\_ 5. Mentally retarded
- \_\_\_\_\_ 6. Orthopedically handicapped
- \_\_\_\_\_ 7. Multiply handicapped
- \_\_\_\_\_ 8. Emotionally disturbed
- 66 \_\_\_\_\_ 9. Learning disabled

# VII SETTINGS FOR SCHOOL PSYCHOLOGICAL ACTIVITIES

1. In his ideal role a School Psychologist should professionally service a student population of no more than \_\_\_\_\_ (Check one)

- \_\_\_\_ 1. 2000  
 \_\_\_\_ 2. 2500  
 \_\_\_\_ 3. 3000  
 \_\_\_\_ 4. 4000  
 \_\_\_\_ 5. 5000

10

2. Programs which should be served by the School Psychologist

Please indicate to what extent each of the programs listed below should be served by the School Psychologist in his ideal role as you perceive it. The following code should be used: 1 - Must Serve; 2 - Should Serve; 3 - May Serve; 4 - Should Not Serve; 5 - Must not Serve. Place the appropriate code number on the line next to each of the programs listed.

- \_\_\_\_ 1. Regular school programs  
 \_\_\_\_ 2. Special Education programs housed in the regular school  
 \_\_\_\_ 3. Pre-school programs  
 \_\_\_\_ 4. Summer school programs  
 \_\_\_\_ 5. Special education schools or facilities serving day students  
 \_\_\_\_ 6. Residential school programs  
 \_\_\_\_ 7. Institutional programs

3. To whom should School Psychologists be most immediately responsible? (Check one only)

- \_\_\_\_ 1. Director of Pupil Personnel  
 \_\_\_\_ 2. Director of Special Education  
 \_\_\_\_ 3. Superintendent  
 \_\_\_\_ 4. Director or Coordinator of Psychological Services  
 \_\_\_\_ 5. Other (Specify) \_\_\_\_\_

# VIII PROFESSIONAL STATUS OF SCHOOL PSYCHOLOGISTS

1. A School Psychologist should have a minimum of \_\_\_\_\_ years of teaching experience. (Check one)

- \_\_\_\_ 1. No  
 \_\_\_\_ 2. 1 - 2 years  
 \_\_\_\_ 3. 3 - 4 years  
 \_\_\_\_ 4. 5 or more years

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## VIII (cont.)

2. A School Psychologist should have a teaching certificate. (Check one)

- ☐ 1. Strongly agree  
☐ 2. Agree  
☐ 3. Disagree  
☐ 4. Strongly disagree

20

3. A School Psychologist should be legally certified or licensed at what level? (Check one)

- ☐ 1. Consulting Psychologist  
☐ 2. Psychologist  
☐ 3. Psychological Examiner  
☐ 4. School Psychologist  
☐ 5. Other (Specify) \_\_\_\_\_  
☐ 6. None of the above

4. A School Psychologist should be held accountable according to specified behavioral objectives. (Check one)

- ☐ 1. Strongly agree  
☐ 2. Agree  
☐ 3. Disagree  
☐ 4. Strongly disagree

5. A School Psychologist should ideally have at least a \_\_\_\_\_ degree. (Check one)

- ☐ 1. B.A. or B.S.  
☐ 2. M.A. or M.S.  
☐ 3. Ed. S  
☐ 4. Ed. D  
☐ 5. Ph. D

6. School Psychologists should utilize the assistance of trained paraprofessional aides when appropriate in the administration of psychological tests. (Check one)

- ☐ 1. Strongly agree  
☐ 2. Agree  
☐ 3. Disagree  
☐ 4. Strongly disagree

24

## VIII (cont.)

## 7. Professional Affiliations for School Psychologists (Directors of Special Education may omit this question.)

Please check the following organizations according to their degree of importance to the School Psychologist. Please use the following code:

1 - Must Belong; 2 - Should Belong; 3 - May Belong; 4 - Should Not Belong;  
5 - Must Not Belong

- 26
- ☐ 1. Council for Exceptional Children (CEC)
  - ☐ 2. National Education Association (NEA)
  - ☐ 3. Michigan Education Association (MEA)
  - ☐ 4. Local Education Association
  - ☐ 5. Michigan Association of School Psychologists (MASP)
  - ☐ 6. Michigan Psychological Association
  - ☐ 7. National Association of School Psychologists (NASP)
  - ☐ 8. Division 16 (School Psychology Division) of American Psychological Association (APA)

8. A School Psychologist should be free to engage in "private practice."  
(Check one)

- ☐ 1. Strongly agree
- ☐ 2. Agree
- ☐ 3. Disagree
- ☐ 4. Strongly disagree

9. In order for a School Psychologist to improve professionally and keep "up-to-date" he should do the following: Please check each one according to the following code: 1 - Must Do; 2 - Should Do; 3 - May Do; 4 - Should Not Do; 5 - Must Not Do

- ☐ 1. Visit school programs in other school districts
- ☐ 2. Enroll in university courses
- ☐ 3. Attend national, state, regional, and local conferences
- 37 ☐ 4. Read professional journals

IX IMPROVEMENT OF COMPETENCIES

In what professional areas do you perceive that School Psychologists need to improve skills and competencies in view of changes which are taking place in their role?

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## APPENDIX C

COVER LETTER EXPLAINING THE QUESTIONNAIRE

## APPENDIX C

### COVER LETTER EXPLAINING THE QUESTIONNAIRE

MICHIGAN STATE UNIVERSITY - EAST LANSING - MICHIGAN - 48824

COLLEGE OF EDUCATION - DEPARTMENT OF ELEMENTARY AND SPECIAL EDUCATION - TRICKUM HALL

February 9, 1973

Dear Colleague:

Attached is a questionnaire for completion by all School Psychologists and Directors of Special Education in the State of Michigan.

The role of the School Psychologist in Michigan is undergoing rapid transformation due to the expansion of Special Education programs, Mandatory Special Education legislation, increased demands for service, and the recognition of the need to broaden the scope of school psychological services as evidenced by the passage of House Bill 5560 which became Michigan Public Law 353 on January 9, 1973. The purpose of this study is to identify what activities the School Psychologist should perform and to determine the relative importance of these activities in the ideal role of the School Psychologist in Michigan as perceived by both School Psychologists and Directors of Special Education.

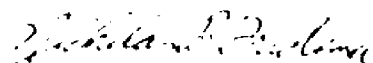
This survey has been prepared with the guidance and support of Dr. John Braccio, and is being supported and endorsed by the Michigan Association of School Psychologists.

Your perceptions will provide insight into the new and developing role of the School Psychologist. The information gained will be used to further develop and define the functions of the School Psychologist in Michigan, develop appropriate inservice training for School Psychologists, and help universities assess the needs of their school psychology training programs.

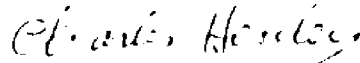
The questionnaire is self-explanatory and will take approximately thirty minutes to complete. All answers are completely confidential so please feel free to express your frank opinions and true feelings. Please fill this out as soon as possible, and return it in the enclosed envelope by February 28. The results of this survey will be made available to you at a later date.

Your cooperation and support is greatly appreciated and we thank you in advance.

Cordially,



Nicholas B. Fridsma  
Graduate Assistant  
Michigan State University



Dr. Charles Henley, Professor  
Department of Special Education  
Michigan State University

Enclosures

## APPENDIX D

### FOLLOW-UP LETTER FOR NON-RESPONDENTS

## APPENDIX D

### FOLLOW-UP LETTER FOR NON-RESPONDENTS

MICHIGAN STATE UNIVERSITY EAST LANSING - MICHIGAN 48824

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COLLEGE OF EDUCATION - DEPARTMENT OF ELEMENTARY AND SPECIAL EDUCATION - BRICKSON HALL  
March 1, 1973

Dear Colleague:

It is a pleasure to report that the return to date of the questionnaire "The Role of the School Psychologist in Michigan" has been encouraging. However, we are trying to obtain a 100% return in order to gain the complete picture of the role that is necessary.

Won't you take a few minutes to complete and return the questionnaire which you received two weeks ago. The information you provide is crucial to the study, and your cooperation will be greatly appreciated.

Thank you very much.

Sincerely,



Nicholas B. Fridama  
Graduate Assistant

NBF:kmk

## APPENDIX E

### CHI-SQUARE TEST OF HOMOGENEITY FOR FIFTY-FIVE SPECIFIC ACTIVITIES

## APPENDIX E

### CHI SQUARE TEST OF HOMOGENEITY FOR FIFTY-FIVE SPECIFIC ACTIVITIES

N (School Psychologists) = 317  
N (Directors of Special Education) = 97

Numbers given are percentage of respondents

	<u>Must Perform</u>	<u>Should Perform</u>	<u>May Perform</u>	<u>Should Not Perform</u>	<u>Must Not Perform</u>
1. Help to develop recreational activities for the handicapped in the community outside of the school environment					
Psychologists	0	3.79	64.67	23.03	8.52
Directors	0	4.12	58.76	26.80	10.31
Psychologists: Mean - 2.64; Standard Deviation - .69					
Directors: Mean - 2.57; Standard Deviation - .73					
Chi-Square: 1.141 d.f.: 3					
Not significant					
2. Observe the child in the classroom or real life situation as one of the means of diagnosis and evaluation					
Psychologists	45.43	48.58	5.99	0	0
Directors	57.73	38.14	4.12	0	0
Psychologists: Mean - 4.39; Standard Deviation - .60					
Directors: Mean - 4.54; Standard Deviation - .58					
Chi-Square: 4.549 d.f.: 3					
Not significant					

- |   | <u>Must<br/>Perform</u> | <u>Should<br/>Perform</u> | <u>May<br/>Perform</u> | <u>Should<br/>Not<br/>Perform</u> | <u>Must<br/>Not<br/>Perform</u> |
|---|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
| 3. Present and interpret the numerical scores of tests to educational personnel |                         |                           |                        |                                   |                                 |
| Psychologists   | 58.68                   | 25.24                     | 13.25                  | 2.52                              | .32                             |
| Directors   | 71.13                   | 19.59                     | 8.25                   | 1.03                              | 0                               |
| Psychologists: Mean - 4.39; Standard Deviation - .83                            |                         |                           |                        |                                   |                                 |
| Directors: Mean - 4.61; Standard Deviation - .69                                |                         |                           |                        |                                   |                                 |
| Chi-Square: 5.469 d.f.: 4   |                         |                           |                        |                                   |                                 |
| Not Significant   |                         |                           |                        |                                   |                                 |
| 4. Write political representatives concerning needed educational legislation    |                         |                           |                        |                                   |                                 |
| Psychologists   | 9.78                    | 40.69                     | 46.69                  | 2.21                              | .63                             |
| Directors   | 1.03                    | 16.49                     | 74.23                  | 5.15                              | 3.09                            |
| Psychologists: Mean - 3.57; Standard Deviation - .72                            |                         |                           |                        |                                   |                                 |
| Directors: Mean - 3.07; Standard Deviation - .62                                |                         |                           |                        |                                   |                                 |
| Chi-Square: 36.324 d.f.: 4  |                         |                           |                        |                                   |                                 |
| Significant at .05  |                         |                           |                        |                                   |                                 |
| 5. Recommend needed changes in the teacher staffing of educational programs     |                         |                           |                        |                                   |                                 |
| Psychologists   | 4.73                    | 36.28                     | 43.85                  | 11.99                             | 3.15                            |
| Directors   | 2.06                    | 25.77                     | 42.27                  | 22.68                             | 7.22                            |
| Psychologists: Mean - 3.27; Standard Deviation - .85                            |                         |                           |                        |                                   |                                 |
| Directors: Mean - 2.93; Standard Deviation - .93                                |                         |                           |                        |                                   |                                 |
| Chi-Square: 12.600 d.f.: 4  |                         |                           |                        |                                   |                                 |
| Significant at .05  |                         |                           |                        |                                   |                                 |
| 6. Help to develop community mental health programs                             |                         |                           |                        |                                   |                                 |
| Psychologists   | 5.99                    | 33.12                     | 56.15                  | 4.10                              | .63                             |
| Directors   | 3.09                    | 36.08                     | 55.67                  | 3.09                              | 2.06                            |
| Psychologists: Mean - 3.40; Standard Deviation - .69                            |                         |                           |                        |                                   |                                 |
| Directors: Mean - 3.35; Standard Deviation - .69                                |                         |                           |                        |                                   |                                 |
| Chi-Square: 3.141 d.f.: 4   |                         |                           |                        |                                   |                                 |
| Not significant   |                         |                           |                        |                                   |                                 |

- |  | <u>Must<br/>Perform</u> | <u>Should<br/>Perform</u> | <u>May<br/>Perform</u> | <u>Should<br/>Not<br/>Perform</u> | <u>Must<br/>Not<br/>Perform</u> |
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
| 7. Perform research by designing and carrying out experimental studies                       |                         |                           |                        |                                   |                                 |
| Psychologists  | 5.36                    | 27.76                     | 62.78                  | 4.10                              | 0                               |
| Directors  | 3.09                    | 29.90                     | 61.86                  | 4.12                              | 1.03                            |
| Psychologists: Mean - 3.34; Standard Deviation - .65   |                         |                           |                        |                                   |                                 |
| Directors: Mean - 3.30; Standard Deviation - .65   |                         |                           |                        |                                   |                                 |
| Chi-Square: 4.190 d.f.: 4  |                         |                           |                        |                                   |                                 |
| Not significant  |                         |                           |                        |                                   |                                 |
| 8. Diagnose and evaluate the affective and emotional disorders of children                   |                         |                           |                        |                                   |                                 |
| Psychologists  | 49.84                   | 35.96                     | 11.04                  | 2.21                              | .95                             |
| Directors  | 56.70                   | 26.80                     | 14.43                  | 2.06                              | 0                               |
| Psychologists: Mean - 4.32; Standard Deviation - .83   |                         |                           |                        |                                   |                                 |
| Directors: Mean - 4.38; Standard Deviation - .81   |                         |                           |                        |                                   |                                 |
| Chi-Square: 4.168 d.f.: 4  |                         |                           |                        |                                   |                                 |
| Not significant  |                         |                           |                        |                                   |                                 |
| 9. Improve the educational opportunities of ethnic minority groups within the school program |                         |                           |                        |                                   |                                 |
| Psychologists  | 14.20                   | 36.28                     | 41.64                  | 6.94                              | .95                             |
| Directors  | 6.19                    | 23.71                     | 56.70                  | 12.37                             | 1.03                            |
| Psychologists: Mean - 3.56; Standard Deviation - .85   |                         |                           |                        |                                   |                                 |
| Directors: Mean - 3.22; Standard Deviation - .78   |                         |                           |                        |                                   |                                 |
| Chi-Square: 13.790 d.f.: 4   |                         |                           |                        |                                   |                                 |
| Significant at .05   |                         |                           |                        |                                   |                                 |
| 10. Coordinate a group achievement testing program for the general educational program       |                         |                           |                        |                                   |                                 |
| Psychologists  | 2.21                    | 11.99                     | 54.26                  | 27.44                             | 4.10                            |
| Directors  | 3.09                    | 9.28                      | 48.45                  | 36.08                             | 3.09                            |
| Psychologists: Mean - 2.81; Standard Deviation - .78   |                         |                           |                        |                                   |                                 |
| Directors: Mean - 2.73; Standard Deviation - .80   |                         |                           |                        |                                   |                                 |
| Chi-Square: 3.270 d.f.: 4  |                         |                           |                        |                                   |                                 |
| Not significant  |                         |                           |                        |                                   |                                 |



- |  | <u>Must<br/>Perform</u> | <u>Should<br/>Perform</u> | <u>May<br/>Perform</u> | <u>Should<br/>Not<br/>Perform</u> | <u>Must<br/>Not<br/>Perform</u> |
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
11. Determine the eligibility of children for one of the types of available special education programs
- |               |       |       |      |      |      |
|---------------|-------|-------|------|------|------|
| Psychologists | 83.91 | 13.25 | 2.21 | .32  | .32  |
| Directors     | 72.16 | 19.59 | 6.19 | 1.03 | 1.03 |
- Psychologists: Mean - 4.80; Standard Deviation - .51  
 Directors: Mean - 4.61; Standard Deviation - .74  
 Chi-Square: 8.604 d.f.: 4  
 Not significant
12. Improve the level of public awareness of the needs of the handicapped
- |               |       |       |       |      |     |
|---------------|-------|-------|-------|------|-----|
| Psychologists | 19.24 | 44.48 | 34.70 | 1.26 | .32 |
| Directors     | 14.43 | 45.36 | 38.14 | 2.06 | 0   |
- Psychologists: Mean - 3.81; Standard Deviation - .76  
 Directors: Mean - 3.72; Standard Deviation - .73  
 Chi-Square: 1.844 d.f.: 4  
 Not significant
13. Diagnose and evaluate the social and family problems of children
- |               |       |       |       |       |      |
|---------------|-------|-------|-------|-------|------|
| Psychologists | 20.19 | 38.49 | 31.86 | 7.26  | 2.21 |
| Directors     | 14.43 | 27.84 | 37.11 | 20.62 | 0    |
- Psychologists: Mean - 3.67; Standard Deviation - .95  
 Directors: Mean - 3.36; Standard Deviation - .97  
 Chi-Square: 19.178 d.f.: 4  
 Significant at .05
14. Include parents in school psycho-educational planning to discuss the psychological and educational needs of their child
- |               |       |       |      |      |   |
|---------------|-------|-------|------|------|---|
| Psychologists | 62.78 | 30.28 | 6.94 | 0    | 0 |
| Directors     | 69.07 | 22.68 | 7.22 | 1.03 | 0 |
- Psychologists: Mean - 4.56; Standard Deviation - .62  
 Directors: Mean - 4.60; Standard Deviation - .67  
 Chi-Square: 5.241 d.f.: 3  
 Not Significant

- |  | <u>Must<br/>Perform</u> | <u>Should<br/>Perform</u> | <u>May<br/>Perform</u> | <u>Should<br/>Not<br/>Perform</u> | <u>Must<br/>Not<br/>Perform</u> |
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
15. Diagnose and evaluate the learning disabilities of children
- |               |       |       |       |      |   |
|---------------|-------|-------|-------|------|---|
| Psychologists | 74.13 | 21.77 | 3.79  | .32  | 0 |
| Directors     | 59.79 | 28.87 | 10.31 | 1.03 | 0 |
- Psychologists: Mean - 4.70; Standard Deviation - .55  
 Directors: Mean - 4.47; Standard Deviation - .72  
 Chi-Square: 10.491 d.f.: 3  
 Significant at .05
16. Disseminate information regarding how sociological and economic conditions can affect children's learning
- |               |       |       |       |      |      |
|---------------|-------|-------|-------|------|------|
| Psychologists | 15.46 | 34.38 | 44.48 | 4.73 | .95  |
| Directors     | 10.31 | 28.87 | 55.67 | 4.12 | 1.03 |
- Psychologists: Mean - 3.59; Standard Deviation - .84  
 Directors: Mean - 3.43; Standard Deviation - .78  
 Chi-Square: 4.105 d.f.: 4  
 Not significant
17. Present and interpret the specific diagnoses of children's problems to educational personnel
- |               |       |       |      |      |   |
|---------------|-------|-------|------|------|---|
| Psychologists | 85.49 | 12.62 | 1.58 | .32  | 0 |
| Directors     | 80.41 | 15.46 | 2.06 | 2.06 | 0 |
- Psychologists: Mean - 4.83; Standard Deviation - .44  
 Directors: Mean - 4.74; Standard Deviation - .60  
 Chi-Square: 3.909 d.f.: 3  
 Not significant
18. Engage in educational and/or vocational counseling with students
- |               |      |       |       |       |      |
|---------------|------|-------|-------|-------|------|
| Psychologists | 7.89 | 30.60 | 48.90 | 9.15  | 3.47 |
| Directors     | 4.12 | 17.53 | 53.61 | 22.68 | 2.06 |
- Psychologists: Mean - 3.30; Standard Deviation - .87  
 Directors: Mean - 2.99; Standard Deviation - .81  
 Chi-Square: 17.951 d.f.: 4  
 Significant at .05

- |  | <u>Must<br/>Perform</u> | <u>Should<br/>Perform</u> | <u>May<br/>Perform</u> | <u>Should<br/>Not<br/>Perform</u> | <u>Must<br/>Not<br/>Perform</u> |
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
19. Give a written psychological report to the parents concerning the psychological and educational needs of their child

Psychologists	6.31	14.83	52.68	17.35	8.83
Directors	18.56	19.59	36.08	15.46	10.31

Psychologists: Mean - 2.92; Standard Deviation - .96  
 Directors: Mean - 3.21; Standard Deviation - 1.22  
 Chi-Square: 17.721 d.f.: 4  
 Significant at .05

20. Engage directly with children in recreational therapy

Psychologists	.32	5.05	60.88	29.65	4.10
Directors	0	2.06	53.61	38.14	6.19

Psychologists: Mean - 2.68; Standard Deviation - .65  
 Directors: Mean - 2.52; Standard Deviation - .65  
 Chi-Square: 4.889 d.f.: 4  
 Not significant

21. Supervise special education personnel

Psychologists	1.58	10.73	42.27	34.70	10.73
Directors	0	3.09	31.96	41.24	23.71

Psychologists: Mean - 2.58; Standard Deviation - .88  
 Directors: Mean - 2.14; Standard Deviation - .82  
 Chi-Square: 18.326 d.f.: 4  
 Significant at .05

22. Conduct individual or group sessions with children in a therapeutic effort to bring about emotional, attitudinal, and/or behavior change

Psychologists	6.62	32.49	48.26	10.09	2.52
Directors	3.09	23.71	46.39	19.59	7.22

Psychologists: Mean - 3.31; Standard Deviation - .84  
 Directors: Mean - 2.96; Standard Deviation - .92  
 Chi-Square: 13.482 d.f.: 4  
 Significant at .05

- |   | <u>Must<br/>Perform</u> | <u>Should<br/>Perform</u> | <u>May<br/>Perform</u> | <u>Should<br/>Not<br/>Perform</u> | <u>Must<br/>Not<br/>Perform</u> |
|---|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
| 23. Help to develop sheltered workshop programs in the community                          |                         |                           |                        |                                   |                                 |
| Psychologists   | 1.89                    | 10.09                     | 69.40                  | 14.20                             | 4.42                            |
| Directors   | 0                       | 9.28                      | 70.10                  | 17.53                             | 3.09                            |
| Psychologists: Mean - 2.91; Standard Deviation - .70                                      |                         |                           |                        |                                   |                                 |
| Directors: Mean - 2.86; Standard Deviation - .61  |                         |                           |                        |                                   |                                 |
| Chi-Square: 2.758 d.f.: 4   |                         |                           |                        |                                   |                                 |
| Not significant   |                         |                           |                        |                                   |                                 |
| 24. Make presentations to civic organizations, community service clubs, and church groups |                         |                           |                        |                                   |                                 |
| Psychologists   | 5.05                    | 34.07                     | 57.73                  | 3.15                              | 0                               |
| Directors   | 6.19                    | 39.18                     | 54.64                  | 0                                 | 0                               |
| Psychologists: Mean - 3.41; Standard Deviation - .64                                      |                         |                           |                        |                                   |                                 |
| Directors: Mean - 3.52; Standard Deviation - .61  |                         |                           |                        |                                   |                                 |
| Chi-Square: 3.914 d.f.: 3   |                         |                           |                        |                                   |                                 |
| Not significant   |                         |                           |                        |                                   |                                 |
| 25. Perform research by designing and using surveys                                       |                         |                           |                        |                                   |                                 |
| Psychologists   | 4.10                    | 18.30                     | 70.35                  | 6.94                              | .32                             |
| Directors   | 4.12                    | 24.74                     | 68.04                  | 2.06                              | 1.03                            |
| Psychologists: Mean - 3.19; Standard Deviation - .63                                      |                         |                           |                        |                                   |                                 |
| Directors: Mean - 3.29; Standard Deviation - .63  |                         |                           |                        |                                   |                                 |
| Chi-Square: 5.451 d.f.: 4   |                         |                           |                        |                                   |                                 |
| Not significant   |                         |                           |                        |                                   |                                 |
| 26. Participate in recruitment of staff for special education programs                    |                         |                           |                        |                                   |                                 |
| Psychologists   | 4.10                    | 19.87                     | 55.21                  | 16.40                             | 4.42                            |
| Directors   | 0                       | 9.28                      | 54.64                  | 26.80                             | 9.28                            |
| Psychologists: Mean - 3.03; Standard Deviation - .84                                      |                         |                           |                        |                                   |                                 |
| Directors: Mean - 2.64; Standard Deviation - .78  |                         |                           |                        |                                   |                                 |
| Chi-Square: 16.201 d.f.: 4  |                         |                           |                        |                                   |                                 |
| Significant at .05  |                         |                           |                        |                                   |                                 |

- |  | <u>Must<br/>Perform</u> | <u>Should<br/>Perform</u> | <u>May<br/>Perform</u> | <u>Should<br/>Not<br/>Perform</u> | <u>Must<br/>Not<br/>Perform</u> |
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
27. Make home visitations to consult with parents regarding the psychological and educational needs of their child
- |               |       |       |       |      |   |
|---------------|-------|-------|-------|------|---|
| Psychologists | 23.34 | 41.64 | 31.55 | 3.47 | 0 |
| Directors     | 25.77 | 44.33 | 3.71  | 6.19 | 0 |
- Psychologists: Mean - 3.85; Standard Deviation - .82  
 Directors: Mean - 3.90; Standard Deviation - .86  
 Chi-Square: 3.179 d.f.: 3  
 Not significant
28. Cooperate with several school districts to solve a larger community wide or county-wide educational problem
- |               |       |       |       |      |      |
|---------------|-------|-------|-------|------|------|
| Psychologists | 13.88 | 36.28 | 46.69 | 2.52 | .63  |
| Directors     | 9.28  | 28.87 | 50.52 | 9.28 | 2.06 |
- Psychologists: Mean - 3.60; Standard Deviation - .78  
 Directors: Mean - 3.34; Standard Deviation - .85  
 Chi-Square: 12.465 d.f.: 4  
 Significant at .05
29. Serve on community boards which are concerned with the needs of the handicapped
- |               |      |       |       |      |   |
|---------------|------|-------|-------|------|---|
| Psychologists | 6.31 | 42.27 | 49.84 | 1.58 | 0 |
| Directors     | 0    | 35.05 | 63.92 | 1.03 | 0 |
- Psychologists: Mean - 3.53; Standard Deviation - .64  
 Directors: Mean - 3.34; Standard Deviation - .50  
 Chi-Square: 9.996 d.f.: 3  
 Significant at .05
30. Prescribe the use of techniques to remediate problems of visual-motor coordination in children
- |               |       |       |       |      |   |
|---------------|-------|-------|-------|------|---|
| Psychologists | 31.23 | 47.00 | 19.87 | 1.89 | 0 |
| Directors     | 21.65 | 46.39 | 26.80 | 5.15 | 0 |
- Psychologists: Mean - 4.08; Standard Deviation - .76  
 Directors: Mean - 3.85; Standard Deviation - .82  
 Chi-Square: 6.992 d.f.: 3  
 Not significant

	<u>Must Perform</u>	<u>Should Perform</u>	<u>May Perform</u>	<u>Should Not Perform</u>	<u>Must Not Perform</u>
31. Make transportation arrangements for exceptional children					
Psychologists	.32	2.21	16.72	49.84	30.91
Directors	0	0	18.56	44.33	37.11
Psychologists:	Mean - 1.91; Standard Deviation - .77				
Directors:	Mean - 1.81; Standard Deviation - .73				
	Chi-Square: 3.941 d.f.: 4				
	Not significant				
32. Study the social case history of the child as one of the means of diagnosis and evaluation					
Psychologists	57.41	34.38	7.89	.32	0
Directors	48.45	34.02	14.43	1.03	2.06
Psychologists:	Mean - 4.49; Standard Deviation - .65				
Directors:	Mean - 4.26; Standard Deviation - .89				
	Chi-Square: 11.783 d.f.: 4				
	Significant at .05				
33. Perform research by using informal information gathering techniques such as discussions or interviews with teachers, administrators, and/or parents					
Psychologists	9.46	17.35	64.35	6.31	2.52
Directors	8.25	20.62	55.67	13.40	2.06
Psychologists:	Mean - 3.25; Standard Deviation - .81				
Directors:	Mean - 3.20; Standard Deviation - .85				
	Chi-Square : 6.210 d.f.: 4				
	Not significant				
34. Design alternative programs for exceptional children such as resource rooms and/or diagnostic learning centers					
Psychologists	22.71	38.80	35.33	3.15	0
Directors	7.22	30.93	48.45	8.25	5.15
Psychologists:	Mean - 3.81; Standard Deviation - .82				
Directors:	Mean - 3.27; Standard Deviation - .91				
	Chi-Square: 34.694 d.f.: 4				
	Significant at .05				

- |  | <u>Must<br/>Perform</u> | <u>Should<br/>Perform</u> | <u>May<br/>Perform</u> | <u>Should<br/>Not<br/>Perform</u> | <u>Must<br/>Not<br/>Perform</u> |
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
35. Recommend needed changes in the physical structure and equipment of the school plant or playground
- |               |      |       |       |       |      |
|---------------|------|-------|-------|-------|------|
| Psychologists | 4.73 | 20.50 | 53.94 | 15.77 | 5.05 |
| Directors     | 2.06 | 11.34 | 57.73 | 20.62 | 8.25 |
- Psychologists: Mean - 3.04; Standard Deviation - .87  
 Directors: Mean - 2.78; Standard Deviation - .83  
 Chi-Square: 7.225 d.f.: 4  
 Not significant
36. Remediate learning problems by directly tutoring children
- |               |      |      |       |       |       |
|---------------|------|------|-------|-------|-------|
| Psychologists | .63  | 4.42 | 21.14 | 47.95 | 25.87 |
| Directors     | 1.03 | 2.06 | 14.43 | 52.58 | 29.90 |
- Psychologists: Mean - 2.06; Standard Deviation - .84  
 Directors: Mean - 1.92; Standard Deviation - .79  
 Chi-Square: 3.709 d.f.: 4  
 Not significant
37. Recommend needed changes in the curriculum of education programs
- |               |       |       |       |       |      |
|---------------|-------|-------|-------|-------|------|
| Psychologists | 15.46 | 41.32 | 38.49 | 4.73  | 0    |
| Directors     | 5.15  | 36.08 | 46.39 | 10.31 | 2.06 |
- Psychologists: Mean - 3.68; Standard Deviation - .79  
 Directors: Mean - 3.32; Standard Deviation - .81  
 Chi-Square: 18.066 d.f.: 4  
 Significant at .05
38. Diagnose and evaluate the intellectual and cognitive difficulties of children
- |               |       |       |      |   |   |
|---------------|-------|-------|------|---|---|
| Psychologists | 84.86 | 13.56 | 1.58 | 0 | 0 |
| Directors     | 78.35 | 20.62 | 1.03 | 0 | 0 |
- Psychologists: Mean - 4.83; Standard Deviation - .41  
 Directors: Mean - 4.77; Standard Deviation - .44  
 Chi-Square: 2.959 d.f.: 2  
 Not significant

	<u>Must Perform</u>	<u>Should Perform</u>	<u>May Perform</u>	<u>Should Not Perform</u>	<u>Must Not Perform</u>
39. Administer and score individual projective or non-standardized tests as one of the means of diagnosis and evaluation					
Psychologists	44.79	32.49	21.14	.95	.63
Directors	37.11	30.93	25.77	4.12	2.06
Psychologists: Mean - 4.20; Standard Deviation - .85					
Directors: Mean - 3.97; Standard Deviation - .99					
Chi-Square: 7.803 d.f.: 4					
Not significant					
40. Organize and supervise one of the specific educational programs within the total special education program					
Psychologists	2.21	8.83	53.63	27.76	7.57
Directors	1.03	2.06	38.14	40.21	18.56
Psychologists: Mean - 2.70; Standard Deviation - .82					
Directors: Mean - 2.27; Standard Deviation - .82					
Chi-Square: 21.379 d.f.: 4					
Significant at .05					
41. Make suggestions to educational personnel for behavior management and/or Behavior Modification of children with adjustment problems					
Psychologists	38.80	47.63	13.25	.32	0
Directors	23.71	47.42	23.71	4.12	1.03
Psychologists: Mean - 4.25; Standard Deviation - .69					
Directors: Mean - 3.89; Standard Deviation - .85					
Chi-Square: 22.161 d.f.: 4					
Significant at .05					
42. Consult with administrators regarding ways to improve educational programs					
Psychologists	29.34	46.37	23.03	.95	.32
Directors	17.53	48.45	29.90	3.09	1.03
Psychologists: Mean - 4.03; Standard Deviation - .77					
Directors: Mean - 3.78; Standard Deviation - .81					
Chi-Square: 8.539 d.f.: 4					
Not significant					



- |  | <u>Must<br/>Perform</u> | <u>Should<br/>Perform</u> | <u>May<br/>Perform</u> | <u>Should<br/>Not<br/>Perform</u> | <u>Must<br/>Not<br/>Perform</u> |
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
43. Cooperate with and utilize the services of the various psychological and educational agencies available in the community
- |               |       |       |      |      |   |
|---------------|-------|-------|------|------|---|
| Psychologists | 60.88 | 33.75 | 5.05 | .32  | 0 |
| Directors     | 44.33 | 45.36 | 9.28 | 1.03 | 0 |
- Psychologists: Mean - 4.55; Standard Deviation - .61  
 Directors: Mean - 4.33; Standard Deviation - .69  
 Chi-Square: 9.302 d.f.: 3  
 Significant at .05
44. Design, submit, and evaluate proposals for educational programs funded by federal and state agencies
- |               |      |       |       |       |      |
|---------------|------|-------|-------|-------|------|
| Psychologists | 5.68 | 15.46 | 61.51 | 12.93 | 4.42 |
| Directors     | 1.03 | 9.28  | 59.79 | 25.77 | 4.12 |
- Psychologists: Mean - 3.05; Standard Deviation - .83  
 Directors: Mean - 2.77; Standard Deviation - .71  
 Chi-Square: 13.250 d.f.: 4  
 Significant at .05
45. Administer and score individual standardized tests as one of the means of diagnosis and evaluation
- |               |       |       |      |      |      |
|---------------|-------|-------|------|------|------|
| Psychologists | 76.03 | 16.40 | 6.62 | 0    | .95  |
| Directors     | 63.92 | 17.53 | 9.28 | 8.25 | 1.03 |
- Psychologists: Mean - 4.67; Standard Deviation - .69  
 Directors: Mean - 4.35; Standard Deviation - 1.02  
 Chi-Square: 28.415 d.f.: 4  
 Significant at .05
46. Diagnose and evaluate the perceptual-motor problems of children
- |               |       |       |       |      |   |
|---------------|-------|-------|-------|------|---|
| Psychologists | 63.41 | 28.08 | 8.20  | .32  | 0 |
| Directors     | 45.36 | 41.24 | 12.37 | 1.03 | 0 |
- Psychologists: Mean - 4.55; Standard Deviation - .66  
 Directors: Mean - 4.31; Standard Deviation - .73  
 Chi-Square: 10.410 d.f.: 3  
 Significant at .05

- |  | <u>Must<br/>Perform</u> | <u>Should<br/>Perform</u> | <u>May<br/>Perform</u> | <u>Should<br/>Not<br/>Perform</u> | <u>Must<br/>Not<br/>Perform</u> |
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
47. Make presentations to P.T.A. groups concerning the general psychological and educational needs of children
- |               |       |       |       |     |   |
|---------------|-------|-------|-------|-----|---|
| Psychologists | 12.93 | 42.90 | 43.85 | .32 | 0 |
| Directors     | 7.22  | 50.52 | 42.27 | 0   | 0 |
- Psychologists: Mean - 3.68; Standard Deviation - .69  
 Directors: Mean - 3.65; Standard Deviation - .61  
 Chi-Square: 3.406 d.f.: 3  
 Not significant
48. Attend school board meetings to present new ideas to board members
- |               |      |       |       |      |      |
|---------------|------|-------|-------|------|------|
| Psychologists | 4.42 | 27.76 | 62.78 | 4.10 | .95  |
| Directors     | 1.03 | 19.59 | 69.07 | 5.15 | 5.15 |
- Psychologists: Mean - 3.31; Standard Deviation - .66  
 Directors: Mean - 3.06; Standard Deviation - .70  
 Chi-Square: 11.724 d.f.: 4  
 Significant at .05
49. Provide inservice meetings for teachers
- |               |       |       |       |      |     |
|---------------|-------|-------|-------|------|-----|
| Psychologists | 15.46 | 46.37 | 36.91 | .95  | .32 |
| Directors     | 13.40 | 41.24 | 44.33 | 1.03 | 0   |
- Psychologists: Mean - 3.76; Standard Deviation - .73  
 Directors: Mean - 3.67; Standard Deviation - .72  
 Chi-Square: 2.013 d.f.: 4  
 Not significant
50. Discuss the child's problem with the teacher as one of the means of diagnosis and evaluation
- |               |       |       |      |   |   |
|---------------|-------|-------|------|---|---|
| Psychologists | 86.75 | 12.93 | .32  | 0 | 0 |
| Directors     | 65.98 | 31.96 | 2.06 | 0 | 0 |
- Psychologists: Mean - 4.86; Standard Deviation - .35  
 Directors: Mean - 4.64; Standard Deviation - .52  
 Chi-Square: 22.497 d.f.: 2  
 Significant at .05

- |  | <u>Must<br/>Perform</u> | <u>Should<br/>Perform</u> | <u>May<br/>Perform</u> | <u>Should<br/>Not<br/>Perform</u> | <u>Must<br/>Not<br/>Perform</u> |
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
|--|-------------------------|---------------------------|------------------------|-----------------------------------|---------------------------------|
51. Work as a member of a committee that is exploring a particular educational problem in the school district
- |               |       |       |       |      |   |
|---------------|-------|-------|-------|------|---|
| Psychologists | 13.25 | 35.02 | 50.79 | .95  | 0 |
| Directors     | 12.37 | 35.05 | 51.55 | 1.03 | 0 |
- Psychologists: Mean - 3.61; Standard Deviation - .72  
 Directors: Mean - 3.59; Standard Deviation - .72  
 Chi-Square: .058 d.f.: 3  
 Not significant
52. Perform research by reviewing and summarizing pertinent professional literature
- |               |      |       |       |      |      |
|---------------|------|-------|-------|------|------|
| Psychologists | 9.46 | 26.81 | 60.88 | 2.52 | .32  |
| Directors     | 7.22 | 20.62 | 67.01 | 3.09 | 2.06 |
- Psychologists: Mean - 3.43; Standard Deviation - .71  
 Directors: Mean - 3.28; Standard Deviation - .73  
 Chi-Square: 5.208 d.f.: 4  
 Not significant
53. Help to formulate special education administrative policy
- |               |       |       |       |       |      |
|---------------|-------|-------|-------|-------|------|
| Psychologists | 11.04 | 34.38 | 41.64 | 9.46  | 3.47 |
| Directors     | 1.03  | 19.59 | 60.82 | 11.34 | 7.22 |
- Psychologists: Mean - 3.40; Standard Deviation - .93  
 Directors: Mean - 2.96; Standard Deviation - .80  
 Chi-Square: 22.405 d.f.: 4  
 Significant at .05
54. Prescribe specific curriculum materials to remediate the educational and learning problems of children
- |               |       |       |       |      |   |
|---------------|-------|-------|-------|------|---|
| Psychologists | 32.81 | 44.79 | 21.45 | .95  | 0 |
| Directors     | 24.74 | 42.27 | 27.84 | 5.15 | 0 |
- Psychologists: Mean - 4.09; Standard Deviation - .76  
 Directors: Mean - 3.87; Standard Deviation - .85  
 Chi-Square: 9.796 d.f.: 3  
 Significant at .05

	<u>Must</u> <u>Perform</u>	<u>Should</u> <u>Perform</u>	<u>May</u> <u>Perform</u>	<u>Should</u> <u>Not</u> <u>Perform</u>	<u>Must</u> <u>Not</u> <u>Perform</u>
55. Help to develop employment opportunities for the handicapped in the community					
Psychologists	1.58	13.88	60.25	19.56	4.73
Directors	2.06	7.22	62.89	21.65	6.19
Psychologists: Mean - 2.88; Standard Deviation - .76					
Directors: Mean - 2.77; Standard Deviation - .76					
Chi-Square: 3.336 d.f.: 4					
Not significant					