A STUDY OF THE CONTINUING EDUCATION INTERESTS OF SCHOOL PSYCHOLOGISTS IN MICHIGAN: CONSIDERATIONS FOR PLANNING AND DEVELOPMENT

By

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ABSTRACT

A STUDY OF THE CONTINUING EDUCATION INTERESTS OF SCHOOL PSYCHOLOGISTS IN MICHIGAN: CONSIDERATIONS FOR PLANNING AND DEVELOPMENT

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The study was conducted to provide information for the planning and development of continuing education opportunities for school psychologists in Michigan. Regulations adopted by the State of Michigan in 1992 require the completion of specific continuing education requirements as a condition of maintaining the proper certification for practice. The choice of options to complete the requirement, along with a consideration of factors such as preferred sponsor, preferred context, release time, reimbursement from an employer, and willingness to travel to participate in a continuing education activity, was investigated. Also considered was the level of interest in developing a specialty in the delivery of services, either by the school age or disability category served. Recent literature in the field has suggested a broader role in the delivery of school psychological services. The writer investigated the level of interest in the broad competency areas outlined in state regulations for school psychologists, which can be used, in part, to

define the expanded role. To facilitate planning and development of conferences, workshops, or college courses, the level of interest in specific current topics was investigated as well. Finally, the researcher collected demographic data on school psychologists in Michigan to study the relationship between gender, educational level, years of experience, location of employment, and work setting and the participants' preferences and interest levels.

It was found that school psychologists preferred a combination of college credit and state-board-approved continuing education units (SBCEUs) to complete the new requirement. For credit, they preferred an organizational sponsor and a local sponsor for SBCEUs. Most respondents reported release time to attend continuing education activities. A large percentage reported some reimbursement for conference or convention activities. Most reported convenient access to continuing education opportunities and a willingness to travel up to 50 miles to participate in them. The investigation showed a strong level of interest in specialization for both school age and disability categories. In the broad competency areas, the interest levels were strongest for intervention, prevention, and consultation activities. Statistically significant relationships were found between gender, educational level, and location of employment and participants' reported preferences and interest levels.

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CHAPTER I

INTRODUCTION TO THE STUDY

Introduction

Regardless of the initial preparation for practice of school psychology, there will always be new ideas and concepts as the knowledge base and ideology of the field expand over time. It is generally agreed that continuing professional development is both a necessary and an expected activity for a school psychologist.

The concept of a profession implies, among other criteria, responsibility for evaluation of the services that school psychologists provide, including the need for practitioners to examine their own delivery of services to make changes or improvements (Houle, 1980). A recommendation to do so is not a completely new idea to school psychologists on the national level. The American Psychological Association (APA) has been an advocate of on-going professional development for many years, especially following the initiation of professional institutes for school psychologists by the Division of School Psychology 16-APA in the 1950s (Fagan, 1993). This division offers school psychologists presentations within the broad context of the annual APA convention.

The National Association of School Psychologists (NASP) also has been an advocate of continuing education. Under the sponsorship of this professional organization, many states have developed state school psychological associations. One of the basic purposes of these state affiliates was to provide continuing

professional development opportunities to their memberships. As a result, association-sponsored workshops and special skill-development programs have become a very popular means of attempting to improve the skills of practicing school psychologists.

NASP was responsible for developing and executing a program of national certification that also carried a standard for continuing education as a renewal requirement. This program, which was formalized in 1989, had its historical beginnings in 1974 with an organizational recognition of the need to provide a program of continuing professional development for school psychologists. In 1974, the NASP Executive Board and Delegate Assembly approved the Continuing Professional Development Committee (CPDC) as a standing committee. Initially, the CPDC awarded the Continuing Professional Development Recognition Certificate and later the NASP Certificate for Continuing Professional Development for the completion of organized and documented continuing education activities. After a number of modifications, the continuing professional development program continued until 1989, when it was replaced with the national certification process.

This **voluntary** program stresses continuing professional development through many types of experiences. Self-study through reading of professional literature, participation in state offices, attendance at conferences or workshops, and college courses are examples of activities that are considered acceptable.

The national certificate must be renewed every three years. This system completed a second round of three-year renewals in 1995. The rationale underlying the national certification was to establish not only standards for continuing professional development but also a credential that would be recognized and

accepted for practice across the country. To date, only 11 states have instituted a reciprocal agreement based on this credential.

In 1989, when the national certification process was begun, 537 school psychologists from Michigan qualified for the credential (NASP, 1989). This represented about 50% of the practicing school psychologists at the time. Only two-thirds of the original group renewed their national certificate (Broadwater, 1995). The effect of this certification process in Michigan was small, with only 25% ($n = 308$) of the practicing Michigan school psychologists renewing the national credential.

In 1988, the Michigan State Board of Education's Office of Special Education formed a task force to study the practice of school psychology in the state and to develop recommendations for change or improvement. The NASP continuing education model subsequently was incorporated by the State Board of Education's office of Special Education in a redesign of the training and continuing professional development requirements for school psychologists in Michigan. A core consideration of the new design was to make continuing education an employment requirement rather than a recommendation or a voluntary practice. The continuing education requirement was defined as the completion of six semester hours of college credit from a state-board-approved institution of higher learning or the equivalent in state-board-approved continuing education units (SBCEUs) within a five-year time frame.

Purpose of the Study

The researcher's overall purpose in this study was to provide data for professional organizations, universities, and intermediate school districts in the planning and development of continuing professional development opportunities for

school psychologists. Information was collected on school psychologists' plans to satisfy the new Michigan CEU requirement. The information collected in this study will be useful for planning courses, workshops, and/or conferences that satisfy the new requirements and meet the professional needs and interests of school psychologists. The information gathered will help identify a broad range of topics for conferences, courses, or workshops related to school psychologists' professional needs.

Background

In September 1992, the Michigan State Board of Education adopted a new set of regulations that required school psychologists to obtain certification as a necessary credential for practice in the public schools. These new regulations replaced a process called Full Approval, which had been in effect for many years. The new regulations bring school psychologists into the educational certification system along with teachers, counselors, and school administrators. These regulations were written to ensure a high standard of initial preparation for entry into a professional role in public education. To maintain high standards in educational practice, the regulations also require a program for continuing education for renewal of the certificate. The certificate is valid for a period of five years, at which time it must be renewed with evidence of continuing education in order to continue to practice in the public schools.

The new regulations define two levels of certification: preliminary certification and full certification. The preliminary certificate is granted in conjunction with completion of a minimum of 45 graduate semester hours from a state-board-approved university training program and a 600-clock-hour internship. The full

certificate, which is granted upon satisfactory completion of one year of supervised practice, carries the continuing education requirement for renewal. The initial implementation of the rule allowed for the majority of practicing school psychologists to be "grandfathered" into the system with full certification, including those with M.A. degrees as well as those with an Ed.S. or a doctorate. This is the first group of school psychologists who will be affected by the requirement for continuing education, which must be completed by 1997.

There is some flexibility in how the continuing education requirement may be fulfilled. College course work, SBCEUs, or any combination of college credit and SBCEUs totaling the prescribed number of contact hours in credits and/or SBCEUs will satisfy the requirement. An SBCEU is defined by State Rule R380.206, which establishes the requirements for initially obtaining a School Psychology Certificate and for the renewal of the certificate. It also defines an SBCEU and its corresponding equivalent in college credit. An SBCEU means credit received for successfully completing a state-board-approved professional development program. One SBCEU equals 10 contact hours in a class, workshop, seminar, conference, or clinical activity. One semester credit equals 30 contact hours. The rule further states that "the renewal of the certificate requires the completion of 6 semester hours of credit in an approved program or the equivalent in approved state board continuing education units (SBCEUs)." All renewal evidence submitted most demonstrate a contribution to the individual's professional development as a school psychologist. College course work must be taken at a state-board-approved institution of higher learning. However, it is not required that course work for renewal be taken in a School Psychology, Teacher Education, or School Administration department. For example, a psychology course may be taken through a Psychology

department of a college or university. It is also not required that course work submitted for renewal be taken at the graduate level. To complete the renewal process, a college transcript must be provided to the state.

R380.206 also allows the requirement to be fulfilled by the acquisition of 18 SBCEUs. The ratio is three SBCEUs equal one semester hour of credit. SBCEUs may be earned only at state-board-preapproved conferences, workshops, or inservice presentations. Or they may be granted by state-approved institutions such as colleges or universities, teaching hospitals, intermediate school districts, or professional organizations that sponsor on-going educational opportunities for employees or members. At the time of renewal, the individual must complete a state application form indicating the types of programs that have been approved for SBCEUs they have attended and request the program sponsors to mail to the state board a record or transcript of the SBCEUs that have been earned by the individual.

R380.206 allows the additional flexibility of permitting the individual to choose any combination of college courses and SBCEUs as long as it fulfills the basic hourly contact requirement. For example, a combination of a three-credit college course and the completion of nine SBCEUs would be acceptable for renewal. The same type of documentation must be submitted when application for renewal is made: a college transcript and evidence of completion of the SBCEUs.

These changes will likely increase the demand for continuing education opportunities and may require institutions of higher education, school districts, and professional organizations to offer a greater variety or increased number of continuing education programs. The development and expansion of educational programs in any sector is complex. It requires the additional commitment of many resources such as administrative staff, instructional staff, support staff, time,

facilities, and finances to accomplish. For school districts and professional organizations, the changes will require, in addition, the development or implementation of a system for record keeping to provide the necessary documentation for individuals who participate in their programs. This can quickly become a significant burden on school districtss and professional organizations' human and financial resources.

The Michigan Association of School Psychologists (MASP) has long been a provider of professional development opportunities for its members through annual statewide conferences and regional workshops or inservice presentations. This organization was one of the first professional groups in the state to gain state board of education approval to offer SBCEUs to its members for attendance and participation in such sponsored activities. The organization's responsibility to meet the needs of its membership in completing the new mandate requires planning continuing education opportunities that are of strong interest and contribute significantly to the professional growth of school psychologists. The responsibility for the design and development of a system for the necessary record keeping and documentation will place an increased demand on the organization to manage the process. In 1993 the executive board of MASP authorized the present researcher to collect information from school psychologists in the state to help focus and direct the planning and budget for future professional development opportunities.

A study of the entire population of school psychologists has never been done in Michigan. The data collected to answer the basic questions cited above will also provide additional information about the population of school psychologists in Michigan and their current practice.

During the past several years, many studies have been conducted on the roles and functions of school psychologists, based on national samples. Information gained from the present study will provide an estimate of how closely Michigan school psychologists compare to their national colleagues. Some of these national studies have focused on such topics as interest in a doctoral degree (Brown, 1989a, Cobb, 1989; Fagan, 1989; Reschly & Wilson, 1995), amount of time spent in various activities such as assessment or consultation (Fagan & Wise, 1994; Huebner, 1992; Miller, Witt, & Finley, 1981), and interest in developing skills to serve a specific disability or age population (Fagan & Wise, 1994).

State Rule R380.203 establishes the role and expected competencies of school psychologists in Michigan. The rule states,

Among other functions a school psychologist may:

a. Be involved in planning educational intervention, curriculum, management, and teaching strategies for pupils.

b. Consult and counsel pupils, administrators, school personnel, parents and others.

c. Be available for evaluation of all pupils.

d. Evaluate pupils referred as potential candidates for special education programs and present a report to the local educational authority on pupils evaluated.

e. Administer tests which may include intelligence, achievement, personality, and perceptual-motor tests.

f. Interpret the psychological and other diagnostic data to professionals, parents, pupils, and others.

State Rule R380.208 specifies the ways that school psychologists will demonstrate the various competencies to fulfill the role as defined in R380.203.

Many national studies have indicated that school psychologists continue to spend a major part of their time in the assessment role and only a small amount of

time engaged in the other roles and functions (Cook & Patterson, 1977; Curtis & Meyers, 1988; Fagan & Wise, 1994; Graden, Zins, & Curtis, 1988; Hughes, 1979; Meacham & Peckham, 1978; Reschly & Wilson, 1995; Smith, 1984; Wright & Gutkin, 1984). The extensive data collected in this study will provide information, as defined by the level of interest, about how closely school psychologists in Michigan are aligning with the ideology of the broadened role called for in the current school psychology literature and the current state rules that define the role and expected competencies.

Limitations of the Study

There are several limitations to this study. The researcher focused only on the first group of fully certificated Michigan school psychologists who were included in the data base obtained from the Michigan Department of Education (MDE) Office of Professional Preparataion and Certification. Persons holding preliminary certification were not included. Therefore, the results of this study may not generalize to other states.

Although precautions were taken to check on the representativeness of the respondents vis-a-vis the nonrespondents to the survey, there remains the possibility that the respondents were not typical of the nonrespondents.

The study did not cover interest levels related to other specific topics outside the field of school psychology, nor did it cover all possible topics of specific interest for continuing education. For example, during the course of the study, a strong interest has developed in the area of expanding school psychological services into the health care arena. As a consequence, no items relating to this new development were included in the survey.

The new certification rule allows the completion of college credit to satisfy the continuing education requirement. However, the questionnaire did not ask whether respondents would choose to take graduate or undergraduate course work. It asked for information on the type of course work that might be chosen--for example, whether the course would be in psychology, education, or a related field.

Although the researcher looked into participants' interest in developing specialty areas, she did not investigate whether there was any interest in expanding school psychological services in general education.

This study did not address the issue of noncompliance with the requirement due to individuals who might leave the field before their certification expires and would therefore be unaffected by the need for continuing education. Nor did the study address the question of interest in private practice or whether individuals possessed the proper state license for private practice.

Last, the researcher reported only what school psychologists said they would do, not what they actually did. And although the researcher reported the interest levels of school psychologists in several areas, she did not address the issue of how developing or expanding personal interest would actually affect practice and best meet the needs of students.

CHAPTER II

REVIEW OF THE LITERATURE

The review of the literature covers four major areas pertinent to the topic of continuing education for the profession of school psychology. First, discussion of the background and development of continuing education in the field of school psychology includes the reasons for the provision of continuing education opportunities, the need to participate in them, the traditional providers of continuing education programs, and the traditional methods and means of providing them. These topics all are discussed within the context of the trends in education, which now require continuing education participation as a condition of continued good standing in professional organizations and as a condition of continued employment.

Second, an overview of the current status of the field of school psychology provides a context in which to consider specific topics or types of continuing education programs that might be of interest to practitioners. The overview includes discussion of the many changes that currently affect practice in the schools: (a) the continuing call from within the field for a broader role in the delivery of services; and (b) the changing demographic picture of practitioners as to gender, level of education, place of employment, and school setting.

Third, the review considers the current trends in education reform relevant to the practice of school psychology and special education. This information provides the rationale for obtaining current interest levels of practitioners and for the content of the questions on the survey instrument. Last, the review provides background information and support for the formulation of the research questions posed in the study.

Background

The concept of continuing education within a profession is not a new idea. Professional psychology is a science-based practitioner profession. As such, professional psychology is committed to continuing development of its knowledge base, and the practice of psychology should be guided not only by theory and previously established facts but also by any relevant, more recent additions to what is known. Continued learning is an essential part of the natural evolution of professions and professionals (Houle, 1980). The concept of a profession implies responsibility for evaluation of services, including the need for individual practitioners to examine their own delivery of services (Houle, 1980). The value of examining service delivery is two-fold. One is related to accountability and ethical responsibility, and the other one to feedback or self-supervision, so that individuals can monitor and improve their skills to achieve maximum professional competence.

School psychologists are covered by the ethical codes of conduct that have been established by APA and NASP. Although membership in these organizations implies an acceptance of the ethical codes to guide conduct and practice, the codes

must be adhered to whether or not a practitioner is a member of an organization as they may be applied to them by their employer, the state or other public bodies. The ethical codes of both organizations contain a requirement for professional competence to be maintained by continuing education. "Psychologists strive to maintain high standards of competence in their work. . . . They maintain knowledge of relevant scientific, and professional information related to the services they render, and they recognize the need for on-going education" (APA's Ethical Principles of Psychologists and Code of Conduct, cited in Fagan & Wise, 1994, p. 303). The NASP Principles of Professional Ethics also require that "School Psychologists engage in continuing professional development. They remain current regarding developments in research, training, and professional practices that benefit children, families, and schools" (cited in Fagan & Wise, 1994, p. 332).

The need for continuing professional development is based on the realization that professional obsolescence can occur within the working life of any field. Dubin (1972) stated that a professional's competence often is measured by the construct of half-life. He defined this as the time after completion of professional training when, because of new developments, practicing professionals have become roughly half as competent as they were upon graduation to meet the demands of their profession. Dubin estimated that the half-life of psychological training averages about 10 to 12 years. Although some areas of psychology undoubtedly have a shorter half-life, Rosenfield (1981) argued that the rate of change in educational and developmental psychology seems greater than in most other areas. Hynd, Pielstick,

and Schakel (1981) estimated that the half-life for a school psychologist's knowledge is perhaps three to five years. This rate of change has much relevance for school psychologists in terms of the professional responsibility for continuing education. The practice of school psychology requires an emphasis on self-supervision as school psychologists often function in isolation from other school psychologists, and supervision is limited or nonexistent (Rosenfield, 1981). The new continuing education requirement enforces the ethical responsibility and provides an opportunity for feedback and continued professional growth.

Lifelong learning and the need to have contact with new developments become integral to the profession. Rosenfield (1981) further stated that lifelong learning and the habits and motivation related to that concept suggest the need for education based on the needs of the adult learner. The method of fulfillment of the new continuing education requirement for school psychologists in Michigan is, in part, self-directed. Fulfilling the requirement by university or college credit, SBCEUs, or some combination of the two, is left to the personal choice of the practitioner. Likewise, the topic of a college or university course or approved CEU activity chosen by a practicing school psychologist to fulfill the new continuing education requirement is left to personal interest or expediency.

Hynd and Schakel (1981) stated that the success of continuing education programs is determined by the recognition of their value to practitioners. The historical literature of school psychology includes many national surveys of practitioners that have indicated the need for workshops and seminars in such areas

as learning disabilities, emotional impairments, and assessment procedures, including neuropsychological, personality, and preschool techniques. Other areas include intervention strategies, legal issues,and consultation (Hynd & Schakel, 1981). National studies, which are assumed to be representative of the field of school psychology as a whole, suggesting interest in these broad topics for continuing education, may be too general to meet the needs and interests of practitioners in a single state. The subjects for such national studies usually area drawn from the membership lists of national organizations such as APA or NASP. Not all practicing school psychologists belong to a professional organization. For example, MASP represents approximately 65% of the school psychologists in Michigan (Oermann, 1996). The results of these studies may not, therefore, provide accurate estimates of the interest levels of **all** practitioners at either the national or the state level.

For example, in a study of job satisfaction paralleling a national study among Virginia school psychologists, and which included both members and nonmembers of national professional organizations, the national survey results tended to overestimate the findings (Levinson, Fetchkan, & Hohenshil, 1988). The information gained from these national studies, therefore, may be too general to provide accurate information for state organizations, state colleges/universities, and local/intermediate school districts to plan courses, conferences, and workshops. Information gained from members of national organizations may not have the same

value to **all** of the practitioners within Michigan to satisfy their own professional interests and fulfill the continuing education requirement.

Provision of Continuing Education

Hynd et al. (1981) suggested that when continuing education is required by law, the requirements "constitute an additional impetus for providing CE opportunities" (p. 485). The requirement for continuing education by the Michigan Department of Education (MDE) as a criterion for continued eligibility for certification to practice thus carries with it the responsibility for state professional organizations, state colleges sand universities, mental health institutions, and school districts in Michigan to provide opportunities to satisfy the needs and interests of practicing school psychologists.

As a distinct specialty in the field of psychology, school psychology has its own research base, body of knowledge, and methods of practice applied within an educational or school context. The level of training to enter the field is extensive. Current Michigan rules establish the educational specialist degree or its equivalent as the standard criterion for certification (see Appendix C). Although it is possible for persons with 45 semester hours and a 600-clock-hour internship to qualify for preliminary certification, this process is used infrequently to enter employment in Michigan schools. The intention of new certification regulations, while allowing for the preliminary certification status, was to require the completion of an educational specialist degree (Witherspoon, 1997). The postgraduate or continuing education needs of these highly trained professionals, by this qualification, are unique as

compared to other areas within the broad field of education in general. Most teachers begin their careers at the baccalaureate level; counselors and administrators begin at the master's level. As school psychologists enter the field with a higher level of training, it is reasonable to assume that their postgraduate training needs will be different from those of others in the educational community.

The provision of continuing education opportunities in Michigan, historically, has been through professional organizations such as APA-Division 16 through its state-level affiliate, the Michigan Psychological Association, and MASP. The most common method of providing continuing education programs for these organizations has been through national-, regional-, and state-level conferences and workshops. For example, MASP has held annual statewide conferences for the past 25 years. It also has sponsored regional conferences and workshops during this time. These events are widely publicized and are open to members and nonmembers alike.

As in most organizations, the workshop topics or major conference theme is usually chosen by a committee. Although the choice may reflect current issues and developments in the field as perceived by the committee members, it may not necessarily reflect the individual members' interest levels or adult learning needs of current practitioners, or be of interest to nonmembers. In their study of the development of a model for continuing education of school psychologists in Michigan, Lesiak, Petty, and Braccio (1975) found that topics need to be selected that more fully address the educational needs of practicing school psychologists. Although they mentioned that their choice of educational topics used in their model

was based on information gained from a statewide survey, the authors did not provide a copy of their survey instrument, any information as to the nature of the questions used in their survey, the size of sample, or specific results. The model advocated by Lesiak et al. was a "trainer of trainers" procedure in which a small number of school psychologists (n = 22) were nominated by the director of special education in their school district to attend specialized training on two broad topics: behavior modification and affective education. The school psychologists who received the special training were then to hold workshops in 12 regional areas throughout the state to bring the information to more of their colleagues. Although this procedure met with some success, the feedback received from participants in subsequent workshops held by the specially trained group indicated some dissatisfaction with the topics selected for training. To improve practitioners' satisfaction with the model, Lesiak et al. suggested doing regional needs assessments across the state.

The Michigan colleges and universities that train school psychologists also have offered continuing education programs for practitioners. As a large majority of school psychologists work on a school-year-calendar basis, these programs usually have been offered in the summer. Often they are centered around a central theme. Some examples are (a) a curriculum-based assessment workshop offered by Central Michigan University in 1993 on Beaver Island, (b) new assessment techniques for diagnosing learning disabilities offered by University of Detroit-Mercy in 1994, and (c) use of the Rorschach as a projective technique for personality

assessment offered in summer 1996 by Michigan State University. College or university programs might not be accessible to m any practitioners due to the distance required for travel or the cost of tuition.

Hynd and Schakel (1981) cited several studies that indicated a preference for condensed two- to three-day workshops concentrating on a single subject for continuing education purposes. In their study of continuing education in Michigan, Lesiak et al. (1975) found additional factors that influence continuing education activities, such as release time and reimbursement for expenses. These authors pointed out that "school districts must be willing or able to provide the support necessary for these [continuing education] activities" (p. 401) if they are to be successful.

Most school psychologists are employed by local or intermediate school districts. Larger school districts have provisions for staff development or continuing education opportunities that are organized and implemented by educators for educators. The topics are usually of interest to those who either are in a classroom or are responsible for curriculum or educational administration. Although there are areas within the state, such as the Wayne-Oakland-Macomb counties, whose local staff development programs are of interest and benefit to school psychologists, they are not easily accessible to a majority of practitioners. In addition to time, monetary, and distance considerations, lack of widespread marketing of the program and availability only to employees of that school district or intermediate school district limit CEU accessibility.

A further complication with the new continuing education requirement and the granting of CEUs is the application and approval process required by the MDE. To sponsor and provide continuing education opportunities requires accurate record keeping to verify participation in and completion of the program. Whereas college and university course work can easily be documented with a transcript and a grade, documentation of attendance at conferences and workshops sponsored by professional organizations or school districts is problematic. Most local school districts are unable to comply with these requirements, likely due to time pressures and the additional costs of the record keeping (Harberts, 1993).

As a service to its members, MASP accepted this verification responsibility for members and nonmembers who attend MASP-sponsored programs for a nominal administration fee. An additional concern is the legal responsibility for accuracy as errors may affect an individual school psychologist's ability to obtain recertification.

Many mental health institutions and professional organizations throughout Michigan offer professional development opportunities. However, many of the same difficulties--marketing of the program, the time it is offered, travel distance required to attend, the sponsoring organization's neglect to fulfill the requirement to obtain MDE approval to grant CEUs, and the necessary record keeping of participation for accountability--may interfere with the feasibility of attendance by school psychologists.

The major portion of the responsibility for the provision of continuing educational opportunities will be carried by the state professional organizations,

state colleges and universities, and local or intermediate school districts. To do so intelligently, they will need to know the needs and interests of practicing school psychologists.

Overview of the Current Status of the Field

The appropriate role and the accepted function of a school psychologist have been the subject of much debate and conflict between ideology and reality for several years. The literature indicates that school psychologists, historically, have expended an inordinate amount of energy defining their role (Alpert, 1985; Bradley-Johnson, Johnson, & Jacob-Timm, 1993; Cook & Patterson, 1977; Fagan, 1992; Graden et al., 1988; Hughes, 1979; Lacayo, Sherwood, & Morris, 1983; Meacham & Peckham, 1978; Ramage, 1979; Reschly & Wilson, 1995; Wright & Gutkin, 1984). This professional obsession with identity may be a result of multiplicity of role definers and the generalist nature of school psychological practice (Bardon, 1983). Several role researchers have investigated both actual and desired roles (Cook & Patterson, 1977; Curtis & Meyers, 1985; Fagan & Wise, 1994; Graden et al., 1988; Hughes, 1979; Meacham & Peckham, 1978; Reschly & Wilson, 1995; Smith, 1984; Wright & Gutkin, 1984).

Although it is difficult to compare studies due to differences in instrumentation and samples, two findings consistently have emerged from these role studies. First, school psychologists continue to spend approximately 50% of their time in assessment activities and 20% in consultation, with the remaining time divided among counseling students, attending inservice, administering, counseling parents, conducting research, and evaluating programs. Fagan and Wise (1994)

summarized this by saying that "school psychologists spend 60% to 70% of their time in activities that make up only about 25% of their training" (p. 219). Second, school psychologists desire to spend less time in assessment and more time in virtually every other activity, especially in consulting with school personnel (Fagan & Wise, 1994; Huebner, 1992; Miller et al., 1981). The limitations of the psychodiagnostician role and the advantages of alternative models of service delivery, as well as the provision of a broader range of services, especially consultation, have provided the theme for numerous articles in professional journals (Fredriksson, 1986; Graden, 1989; Gutkin & Curtis, 1990; Pryzwansky, 1986; Reschly & Wilson, 1995; Zins & Ponti, 1990).

School psychologists who experience a discrepancy between actual and desired roles may experience job-related tension and lower levels of job satisfaction. For example, in one of the few studies conducted on a statewide basis, Hughes (1979) found a significant negative correlation between the magnitude of the discrepancy between actual and desired roles and job satisfaction among Virginia school psychologists.

Given the consistent finding of a discrepancy in actual and desired role definitions and school psychologists' preference for a more preventative and consultative role, it becomes important to understand the mechanisms and processes of role definition. "The process of role definition refers to those environmental and personal factors that influence the agreed upon formal role description and the daily activities of school psychologists" (Benson & Hughes,

1985, p. 65). From a developmental perspective, it would be important to understand the effects of those forces in the context of the actual activities of school psychologists as the input is transformed into knowledge of what the role should be. It is necessary to understand the mechanisms or processes by which individuals represent their personal perspectives of their professional working world in order to recommend strategies for role expansion and role transformation.

The personal level of interest as expressed within the environmental context of the new state CEU requirement could be one mechanism to inform state professional organizations, state colleges and universities, and local school districts that have responsibility for developing CEU opportunities of the adult learning needs of practicing school psychologists and their movement toward implementing the ideology of an expanded role. Reschly and Wilson (1995), in their study of trends in roles and job satisfaction among school psychologists, suggested that periodic surveys of school psychologists are needed to assess the degree to which changes are occurring in the field and the direction in which they are going.

Trends in Demographics Among School Psychologists

Throughout the historic literature in school psychology, many studies have indicated changes in the characteristics of practitioners over time. Consider practitioner gender composition. Farling and Hoedt (1971) indicated a 60:40 ratio of men to women. By the early 1980s, this figure had changed to a 50:50 or 45:50 ratio (Goldwasser, Meyers, Christenson, & Graden, 1983; Meacham & Peckham, 1978; Ramage, 1979). Fagan and Wise (1994) cited results from a national survey

sponsored by NASP in 1988 showing a 38.2:60.1 ratio of men to women, with 1.7% of their sample recorded as unspecified. In a national survey conducted by Reschly and Wilson in 1991 (cited in Fagan & Wise, 1994), a similar ratio was obtained: 35% males to 65% females. In a more recent study, Reschly and Wilson (1995) continued to find this same gender ratio.

The above-mentioned studies provide a picture of a field that has become highly feminized. Although the actual practice of a profession, based on similar training or adherence to ethical standards, may not show any gender effects, the question of specific interests and adult learning needs by gender remains open. Are there differences in the ways that male and female practitioners prefer to satisfy the new continuing education requirement, or in their topics of interest? The present study was undertaken to provide information on this question, information that might help to plan and organize continuing education opportunities. Such data could be of value to all practitioners, while addressing more specific concerns of both men and women.

The degree status of school psychologists has been a topic of great controversy throughout the recent history of the profession (Brown, 1989b; Cobb, 1989; Fagan, 1993). In the mid- to late 1980s, these writers and others suggested the need for and a naturally occurring trend toward a greater number of school psychologists obtaining the doctoral degree. Brown (1989a), using an extrapolation formula based on the number of school psychology graduates with educational specialist degrees and those who had completed a doctoral program, predicted that

"during the next ten years school psychology will become a predominantly doctoral profession" (p. 175). In their national survey, Reschly and Wilson (1995) did not provide evidence of this trend. Their results supported the educational specialist (Ed.S.) as the most common degree status in the field.

In Michigan, for many years, the required entry-level credential for school psychologists was a master's degree, although some universities did require an Ed.S. For example, Michigan State University required the Ed.S. since 1973. That was changed with the 1987 revision of the State School Code, which set an Ed.S. degree as the entry-level requirement. The new certification rule, which established the continuing education requirement, included a grandfather clause that granted certification to all who were currently practicing school psychologists, regardless of their degree status. The new continuing education requirement allows the choice of obtaining college credit as one means of completion. Will practitioners use this opportunity to pursue an advanced degree in school psychology? A trend in this direction would likely be of interest to the state colleges and universities that offer school psychology training programs. Another consideration for the development of providing continuing education opportunities is whether the current level of education, as defined by degree status of a school psychologist, has an effect on their choice of method to fulfill the CEU requirement or their choice of continuing education topics that reflect specific areas of interest.

Reschly and Connolly (1990) examined prevailing assumptions regarding differences between school psychologists in different employment settings. In their

study they compared school psychologists, based on their employment setting, with regard to the level of professional preparation, roles, employment conditions, continuing education needs, and perceptions of current problems. The employment settings were defined as rural, suburban, or urban. Reschly and Connolly's findings indicated limited support for the existence of a more generalist role for rural school psychologists and more involvement in regular education issues. They also found implications for variations in graduate training programs and in continuing education based on the employment setting. Their national sample was drawn from the 1990 NASP membership roster. The problem of a national sample and the use of a national organization's membership list may have provided results that do not generalize well to the state level or to all practitioners within the state.

In Michigan, school psychologists who are employed by local and intermediate school districts provide services in a variety of employment settings. Whether or not differences exist in the preferences of school psychologists based on employment setting would be of interest to those who must provide CEU opportunities to meet continuing education needs.

Fagan and Wise (1994) reported that the most common employment setting for a school psychologist is the single public school district. The next most common is the cooperative arrangement, in Michigan through the intermediate school district, which provides services to small rural or suburban districts and sometimes to several small-town districts. Fagan and Wise further indicated that school psychologists work in other nontraditional settings such as

> public and private community or state agencies, including community mental health centers, developmental disability centers, or rehabilitation centers; independent and church-related private schools and private practice. Even within school settings differentiation occurs, with some practitioners serving elementary schools and others serving secondary schools, or some performing specific tasks (e.g., work with sensory-impaired children) and some working as generalists. (p. 6)

Fagan and Wise indicated that traditional school settings dominate the field but that the number of nontraditional settings continues to grow.

In their national study of demographic trends, Reschly and Wilson (1995) reported the following results: Primary employment settings were public schools (86%), private practice (4%), hospital (1%), college or university (1%), institutional/ residential setting (1%), clinic (1%), and other settings (5%). It would be of interest to see the patterns of employment among school psychologists in Michigan and to determine whether the type of school setting in which they work has any influence on the choices they make to fulfill the new CEU requirement and in the level of their interest in specific topics or content.

Current Trends in System Reform

In their review of the school psychology literature advocating significant reforms in the service delivery system, Reschly and Wilson (1995) covered more than 17 different studies on this issue. They summarized:

> The reforms are designed to address significant problems in the current system; specifically the undocumented effectiveness of special education programs, nonfunctional and stigmatizing classification of students with mild disabilities, failure of aptitude by treatment interaction approaches to assessment and interventions, poor treatment validity of current measures, overlapping and poorly coordinated special programs, poor quality of

> interventions, and disproportionate minority placement in programs with undocumented benefits. (p. 63)

These problems in the current system have implications for the content or themes of courses, conferences, or workshops of a continuing education nature. Reschly and Wilson (1995) further defined specific reform principles that could give direction to the development of continuing education opportunities:

> The system reform principles involve: (a) the adoption of outcomes criterion to determine the effectiveness of services; (b) use of functional assessment procedures directly related to defining problems in natural settings, monitoring progress, and evaluating outcomes; (c) systematic problem solving; (d) direct measures of academic and social-behavioral performance in natural settings; (e) frequent progress monitoring with changes in interventions when progress toward goals fails to meet expectations; and (f) systematic implementation of principles of instructional design and behavior change. (p. 63)

Additional system reforms of importance for continuing education planning that Reschly and Wilson (1995) suggested are:

> (a) noncategorical classification schemes for students now classified in mild disability categories such as specific learning disability; (b) combining remedial and special education programs such as Chapter I and resource pull-out programs; and (c) attempts to prevent disability classification through provision of services in general education or delivery of special education in general education classrooms. (p. 64)

Along with a call for reform and a redefinition of the delivery system, the literature continues to provide evidence that school psychologists spend most of their time in various activities related to students with disabilities and special education programs (Fagan & Wise, 1994; Reschly & Connolly, 1990; Smith, 1984). Fagan and Wise provided an extensive review of the literature in this area and provided a summary of the various work-related activities of school psychologists and the amount of time spent in each. They found that actual services were heavily

oriented to individual assessment (50% or more), with less emphasis on involvement with interventions (about 25%) and consultation (20%), and almost no involvement with research activities (less than 2%).

The question remains open as to the level of interest school psychologists in Michigan have in these various areas of system reform and in what direction, given the opportunity through the new continuing education requirement, they will move as demonstrated by their choice of continuing education opportunities.

The current Michigan rule (R380.203) stipulating the roles and functions of school psychologists (see Appendix C) requires competence in the broad areas of assessment, consultation, counseling, curriculum, intervention, and prevention. These competency areas, which mirror the delivery-system reform problems and principles, can be used as a frame of reference to help guide the planning of CEU opportunities.

The Michigan state rule also defines the broad topical areas of competence that figure prominently in the literature calling for and defining an expanded role. The current literature related to these broad topics can give direction to specific workshop, conference, or college course themes.

Assessment

As the literature has indicated, school psychologists continue to spend most of their time in assessment. The type of assessment is usually within the framework of finding a child eligible for a special education program or service and consists, for the most part, of individual intelligence tests such as the Wechsler scales, the

Stanford-Binet IV, the Kaufman battery for either children or adults, and individually administered achievement tests such as the Woodcock Johnson, the Wechsler Individual Achievement Test, and the Kaufman Test of Educational Achievement.

Additional assessment time provides updated information on intellectual growth and achievement of students with disabilities to meet legal mandates, both state and federal, for a three-year comprehensive reevaluation of their progress in special education. The same test battery given for an initial evaluation or one that is very similar will likely be used again.

The current sampling of literature in the field suggests expanding assessment skills into other areas: authentic assessment (Christenson, 1991; Kamphaus, 1991), bilingual assessment (Figeroa, Fradd, & Correa, 1989), clinical assessment (Hynd, 1992; Kamphaus, Frick, & Lahey, 1991; Kratochwill & Plunge, 1991; Morris, Bergan, & Fulginiti, 1991), curriculum-based assessment (Fugate, 1993; Mehrens & Clarizio, 1993; Shapiro & Ager, 1992; Shapiro & Eckert, 1994; Stoner, Carey, Ikeda, & Shinn, 1994), functional assessment (Gresham & Gansle, 1992; Kern, Childs, Dunlap, & Clarke, 1994; Kratochwill & Plunge, 1991; Noell & Gresham, 1993), infant assessment (Epps & Jackson, 1991; McLinden & Prasse, 1991; Oakland, 1995), low-incidence handicaps, e.g., autism (Brewster, 1997; Stavrou & French, 1992), personality assessment (Knoff, 1993), preschool assessment (Feil & Becker, 1993; Lidz, 1990), psychopharmacological assessment (Kubiszyn, 1994), neuropsychological assessment (D'Amato, 1990; Farmer & Peterson, 1995; Riccio, Hynd, &

Cohen-Morris, 1993), and vocational assessment (Anderson & Hohenshil, 1990; Hicks, 1994; Nolte, 1994).

Consultation

Fagan and Wise (1994) suggested that the assessment role provides information to determine the nature of services needed by a student; "consultation strengthens the chances that appropriate services will be delivered" (p. 122). They defined the work "consultation" to mean a variety of activities such as giving advice, offering suggestions, and providing counsel or solutions to work-related problems. Recent literature on this topic continues to indicate an ideological push toward greater use of consultation (Conoley & Conoley, 1982; Curtis & Meyers, 1985, 1988; Gutkin & Curtis, 1990; Zins & Ponti, 1990), as well as an increased desire on the part of school psychologists to expand their practice with consultation as a service (Costenbader, Swartz, & Petrix, 1992; Huebner & Mills, 1994; Reschly & Wilson, 1995).

Along with using consultation as a service in the schools, the literature offers an additional direction for the use of these skills in the school health movement. School psychologists are being urged to reconfigure their services toward school-based and school-linked health care services (Talley, Short, & Kolbe, 1996). The use of a consultation model by school psychologists to work closely with parents; social service, health, welfare, and juvenile justice agencies; and business, industry, and communities to address health factors that affect learning is seen as a means

not only to address needs, but also to expand roles (Carlson, Paavola, & Talley, 1995; Romualdi & Sandoval, 1995).

In a recent study of school psychologists in Michigan, Fugate (1993) reported that practitioners indicated that they were spending approximately 12% of their time in consultation. Additional information on this important topic is needed to validate that estimate and provide data on the direction of interest of current Michigan practitioners in developing, improving, or expanding skills in this competency area to help providers plan appropriate continuing education opportunities.

Counseling

Michigan rule R. 380.203 (see Appendix C), which specifies the competencies of the role of a school psychologist, states that, among other functions, a school psychologist may "counsel pupils, administrators, school personnel, parents, and others." The precise meaning of the word "counsel" in this rule has not been defined legally. For some, it is meant to be interpreted in the most general sense of giving advice or information. For others, including many practitioners, it is taken to mean the provision of psychotherapy (Prout, Alexander, Fletcher, Memis, et al., 1993; Watkins, Tipton, Manus, & Huntington-Shoup, 1991) or in studies of job satisfaction as an activity that is a more desired addition to service delivery in the schools (Brown, 1994b; Hughes, 1979; Prout et al., 1993; Smith, 1984; Watkins et al., 1991).

Although it does not consume as much time as other reported work activities, counseling continues to be mentioned in national surveys as an accepted part of the school psychology role. In his national survey, Smith (1984) found that practitioners

spent approximately 11% of their time in counseling activities--"7.3% counseling students and 3.8% counseling parents" (p. 801). Yoshida, Maher, and Hawryluk (1984) found that, of the 60% of their national sample who reported engaging in some counseling activity, 37% reported that they spent 1 to 5 hours per week counseling students, and 16% said they spent 6 to 10 hours per week. In their sample, 46% of the respondents indicated some counseling activity with parents. Of this group, 41% spent 1 to 5 hours counseling parents, and 4% indicated they spent 6 to 10 hours in this activity. In a recent survey of Michigan school psychologists, Fugate (1993) found that his sample reported spending 3.7% of their time in counseling activity. This seeming discrepancy between the national and state-level studies warrants further investigation, particularly as this activity is considered a specific role function within state rules. The level of interest in counseling as a part of the service delivery system in general, as expressed by practitioners in the current study, will give further information to help plan continuing education opportunities emphasizing this area of required competence.

Curriculum

According to current Michigan rule R340.1151 (see Appendix C), school psychologists are to be involved in "planning educational intervention, curriculum, management, and teaching strategies for pupils." As reported in past and current literature, school psychologists spend the bulk of their time doing assessments, including the assessment of children's academic-skills problems. As Shapiro and Ager (1992) indicated, there is a great need to link assessment to instructional

practice. They advocated using curriculum-based assessment as the means to assess a student's failure to perform certain skills and the means to link classroom intervention to the development of an acceptable level of proficiency within specific areas of the curriculum for the student. Further, they saw curriculum-based assessment as an opportunity for a comprehensive examination of the in-class performance of students, thereby strengthening the link between measurement and instruction. They wrote, "Instruction needs to relate constantly to assessment, and, likewise, assessment should be the basis for intervention" (p. 294).

In a call for reform in the school psychology delivery system, authorities (e.g., Reschly, 1988; Reschly, Kicklighter, & McGhee, 1988) have recommended that school psychology practitioners and trainers prepare for several new services to be offered within the field, one of which is instructional design. However, Shinn and McConnell (1994) suggested that current school psychology services typically ignore the role of general education curriculum and instruction practices, as well as their potential contribution to students' academic difficulties. Further, they suggested that ignoring this contribution can reduce the recognition of effective instructional practices that can serve to reduce or remediate students' learning difficulties. They proposed that school psychologists direct more effort at ensuring the implementation of effective instructional practices in both special and general education.

In a study of Michigan school psychologists, Fugate (1993) found little support for the use of curriculum-based assessment as an assessment tool. School psychologists in Michigan do not have to possess teaching credentials to enter a

school psychology training program. To provide an introduction to the public schools and the educational system, all of the training programs require a prospective school psychologist to spend time in the schools in a practicum, a supervised internship, or both. The typical preservice training curriculum does not necessarily include college course work in curriculum, instructional design, or teaching methods. Could the lack of acceptance found by Fugate among practitioners in Michigan be related to a lack of interest in these educational fundamentals? The present researcher investigated the level of interest in this important area of expected competence.

Intervention and Prevention

Although State Rule R340.1151 (see Appendix C) specifically mentions "planning educational intervention," the precise meaning of intervention is not defined. In essence, intervention means to come in or between by way of modification. Prevention means to come before, to anticipate, to keep from happening. In educational circles, prevention is commonly accepted to mean activities performed by school personnel to prevent various problem situations or difficulties that could have an adverse effect on the educational progress of students from occurring. Intervention activities are thought of as measures taken to modify, correct, remediate, or eliminate problems or deficiencies that have been identified as an impediment to students' educational progress.

In recent times, the rapid growth of special education programs and services has placed an extreme burden on the financial and personnel resources of the educational system. An effort has been made to slow the growth of these programs

by reducing special education referrals. A number of researchers have found that once a student is referred for a special education evaluation, there is a high probability of an eligibility determination as handicapped and a recommendation for special education. For example, Clarizio and Halgren (1993) found that 80% of rural Michigan children with disabilities remained eligible for special education upon their three-year reevaluation.

In the school psychology literature, school psychologists have been urged increasingly to provide more "prereferral" prevention and intervention activity (Fagan & Wise, 1994). In the literature recommending increasing consultation as a desirable alternative to expanding services, these two activities often are linked under the preferred role for school psychologists. Rosenfield (1987) suggested that school psychologists require increased knowledge of effective and appropriate classroom intervention strategies and improved skills in the process of consultation to become skilled interventionists rather than merely assessors.

Public Law 99-457 requires states to provide early childhood special education through early identification of handicapping conditions or developmental delays. The law requires the development of an individual family service plan, which necessitates the coordination of many community agencies, including the public schools, as a form of mandated early intervention. In their review of the implications of this law for school psychologists, Short, Simeonsson, and Huntington (1990) suggested that practitioners will need additional training specific to young children, such as early child development, family assessment, and intervention.

In a national survey of graduating students and practitioners, the quality of training for intervention procedures was consistently rated significantly lower than other areas of assessment, consultation, and communication (Graden, Christenson, Ysseldyke, & Meyers, 1984). These same individuals rated intervention as the area requiring additional competencies not obtained during training.

The present study of Michigan school psychologists may shed light on the level of interest in the content and process of intervention strategies in this major competency area of the role as defined by the state rule.

Brown, Pryzwansky, and Schulte (1987) defined prevention activities in a slightly different fashion, based on two levels of service: primary and secondary prevention. In their view, primary prevention refers to activities that are proactive and enhance the functioning of a group assumed to already possess positive mental health, for example, enhancing coping skills or developing problem-solving strategies. Secondary prevention, in their view, involves identifying and treating problems before they have serious consequences, for example, early identification and intervention programs for learning and/or developmental problems and remediation efforts for individuals with weak academic skills in some specific area. In a more recent work, Brown (1994a) refined these concepts into what they called universal, selective, and indicated intervention. Universal interventions were seen as very broad in nature, whereas others were targeted and described as selective or indicated. Selective interventions consider factors outside of the child, such as

poverty or low-income status. Indicated interventions include measures to help the child more directly.

In their study of special education directors in Texas, Cheramie and Sutter (1992) found a need for more primary and secondary prevention services. Their results also indicated a need for more involvement with at-risk and regular education students and for more counseling and consultation services from school psychologists. Offord (1996) suggested using a targeted approach to provide interventions as a more effective way to assist high-risk populations.

A sampling of recent literature reveals a trend encouraging school psychologists to become more involved in prevention activities as a means of role expansion. Suggested areas for involvement include the development of crisis-intervention teams to prevent and reduce school violence (Poland, 1994), child abuse and neglect (Alpert, 1992; Herrera & Carey, 1993), and comprehensive school-linked services in collaboration with social agencies to improve children's health and welfare (Romualdi & Sandoval, 1995). The present study will provide an indication of the level of interest in prevention activities among Michigan practitioners.

Specialization

Most school psychologists receive preservice training that prepares them to perform a variety of functions. Most training programs embrace a generalist orientation, which persists even though graduates earn an educational specialist degree. Fagan and Wise (1994) suggested that the rapid development of the

profession in the last two decades has given increasing attention to the issue of whether practitioners should be trained as generalists or specialists. They indicated that although this issue has been discussed frequently in the literature, "little has been published on the subject" (p. 187).

Fagan and Wise believed that several factors that are included in the current educational system reforms will stimulate or encourage greater specialization among school psychologists. The passage of Public Law 99-457 has the potential to increase job opportunities for school psychologists at the infant-toddler and preschool levels. The law requires that services that are identified by the individual family service plan be given by the "highest qualified provider." Fagan and Wise saw this as having a strong impetus to hasten advanced training or the development of a specialty area in practice. They also saw an increased need for practitioners to "specialize in vocational school psychology, secondary, transition, and postsecondary services" (p. 187).

While recognizing that persons who obtain a doctoral degree may have developed a specialty area, Fagan and Wise agreed that many school psychologists develop specialties through

> experience, continuing education and personal interests. For example, school psychologists may obtain additional expertise in the assessment of low-incidence handicaps, preschool assessment, or parent training. As practitioners become more experienced, areas of special expertise commonly develop. . . . Many find that their interests have changed over the years and choose to specialize in a particular topic. Such specialization does not always involve returning to graduate school for formal preparation. Frequently the necessary expertise is gained through conventions, workshops, in-depth reading, and supervised apprenticeships. In some

> instances, a concentration of graduate courses in a specialty area if completed but not as part of a degree program. (p. 188)

This researcher investigated the level of interest in specialization among Michigan school psychologists in areas as defined by school age levels or by specific disability areas.

CHAPTER III

METHODOLOGY

The investigator used a mail-in survey as the primary method. Data were collected by means of a self-administered questionnaire, a common tool for data collection from large groups. The purpose of the specially designed questionnaire was to collect information on demographic factors of respondents, the parameters of the context in which school psychologists are currently working, their choice of options to satisfy the continuing education requirement, and their level of interest in a variety of content topics, which might be useful for course, conference, or workshop planning.

Subjects

The subjects for the study included all individuals who received the school psychologist certificate from the MDE between August 1 and December 31, 1992. The new state regulations require practicing school psychologists who held Full Approval to apply for the certification in order to take advantage of a "grandfather" opportunity. The MDE needed a period of time to evaluate and process all of the applicants and to develop a data base. The data base provided by the MDE

included the title, name, address, terminal educational degree, and gender of the newly certified school psychologists.

The MDE data base included all individuals (N = 1,052) who were issued the new certificate by the state of Michigan as well as those who had applied for preliminary certification status. The Preliminary Certificate does not carry the requirement for continuing education and has other requirements that are not applicable to individuals who were in current practice. The present study included only those who were granted full certification (N = 988) and who were subject to the continuing education requirement.

Individuals were listed in the order of their application dates. The data were reformatted to create an alphabetized mailing list and address labels. To protect privacy and confidentiality, each individual was assigned a case number by reverse order of the alphabet. This case number was not included on the questionnaire to preserve confidentiality, but it was included on the sending address label, as well as the return address labels of the return envelope and the postcard that was to be used in a drawing for a year's free membership in MASP. It was assumed that confidentiality would encourage more extensive participation and return of the questionnaires. The case number was included on the return address label that was attached to the prepaid return envelope and was hand coded on the survey forms as they were returned. This allowed for a simple accounting of which cases in the data base returned the surveys. This system also allowed a second contact to be made with those who did not respond within a three-week period. It allowed for a

further assessment of those who returned the survey form and the incentive postcard and those who returned only the postcard. The postcards of those who did not return surveys were not used in the drawing for membership. There were only a few such cases (n = 14).

Coding the case number on the returned questionnaires also allowed for a comparison of respondents with the nonrespondent group to determine whether any differences existed on the variables of gender and degree. These variables were included in the research questions that framed the study. Differences between the respondents and nonrespondents on these variables could have an effect on the results of the study, possibly indicating that they were different groups.

The Instrument

A questionnaire was designed to collect demographic information, choice of continuing education option, and interest levels needed by professional organizations, universities, and intermediate school districts to lay plans for meeting the state's continuing education requirement. Additional data regarding current practice activities, release time, and availability of reimbursement for continuing education opportunities also were collected.

The questionnaire (see Appendix A) was divided into six sections. The first section, entitled **About You**, contained questions on basic demographic information. Included in this portion were questions relating to the gender of the respondent, the level of education as defined by the terminal educational degree, and the number of years of practice as a school psychologist. These data were necessary to assess

whether there were demographic differences that would have an effect on the type of plan to complete the continuing education requirement or an effect on the choices made by the respondents.

The second section, **About Your Place of Employment**, contained questions relating to current geographic location and type of employment setting. Location referred to place of employment, such as a city, small town, or rural area. The employment setting referred to the type of school: public, private, parochial, or other. Data collected in this section were needed to determine whether there were any differences in the choice of plan to complete the continuing education requirement or in the level of interest in various topics related to the geographic area or employment setting. Recent writers have, for example, suggested that there are differing educational needs for rural and urban school psychologists (Reschly & Connolly, 1990).

The third section of the questionnaire, called **About Your Caseload**, contained items related to current practice activities and context. It also covered the level of interest in developing any type of specialized practice, either by the age group served or special education disability category served. These items were designed to collect data that could be used directly to develop continuing education opportunities. Many times, programs or workshops are developed to address such age groups as preschool or elementary school. Also, it is not uncommon to have continuing education opportunities be developed to feature the latest research in a particular disability category.

The fourth section of the questionnaire, called **About Your Continuing Education Plans**, included questions about leave time available for conferences or workshops, reimbursement from their employer, geographic access to continuing education opportunities, and their choice to fulfill the new requirement, college credit, 18 SBCEUs, or some combination of the two. These items were designed to provide information that could be helpful in timing, planning, and marketing continuing education opportunities. This section provided data on the respondents' choice of plan to satisfy the new continuing education requirement, a main question of the study.

The fifth section contained questions designed to measure the respondents' level of interest in continuing education programs addressing the six broad competence areas as defined by state regulations: assessment, consultation, counseling, curriculum, intervention, and prevention. This section was provided to provide data that could be used to develop continuing education opportunities around a competency area as a general theme. With the exception of assessment, these broad areas reflect the types of services called for in the recent literature as the expanded practice role. The data collected in this study will provide a picture in terms of the level of interest in the competency areas of how closely school psychologists in Michigan are aligned ideologically with an expanded practice role.

The last section of the questionnaire covered the level of interest in specific topics for continuing education programs, courses, or workshop development. For

example, what is the level of interest in neuropsychological assessment? Or what is the level of interest in group counseling methods?

All of the questions allowed the participants simply to check or quickly circle their responses. Level-of-interest questions were written as Likert-type scale items with five choices of responses. Very Interested, Interested, Maybe, Not Interested, and Definitely Not Interested. The scale was set from Very Interested (1) to Definitely Not Interested (5).

The questionnaire was piloted and revised with the advice and comments of several practicing school psychologists, many of whom were members of the current MASP Executive Board (N = 31) and members of a graduate-level course for school psychologists (N = 12) at Michigan State University. Before the actual printing and mailing, the questionnaire was reviewed and revised three times. The final revision was field tested on two separate groups for the length of time needed for completion and ease of use. One group was a graduate-level college class for school psychologists (N = 12) and another was the school psychology staff from a local school district (N = 22). Average total time needed to complete the instrument was 15 minutes.

The investigator prepared a cover letter (see Appendix B) to explain the survey and its purposes to the subjects, who received the questionnaire in the mail. The letter included an explanation of the new continuing education requirement and cited the language of the new state regulation directly for reference. The letter assured the confidentiality of responses for those who returned questionnaires. The

content of this letter was reviewed by the MASP Executive Board before printing. Upon initial review, it was considered acceptable and was mailed along with the questionnaire.

Procedure

The cover letter, questionnaire, prepaid return-mail envelope, and a special prepaid postcard were mailed to the 988 individuals in the data base. To increase the probability of participation and a speedy response, the potential participants were offered a chance for a free one-year membership in the MASP, a $50 value. Included in the mailing were instructions on how to use the special prepaid postcard for the drawing. Respondents were instructed to mail it in, separately, **after** they had completed and mailed their questionnaire. If they chose to participate in the drawing, they needed to complete the postcard with their name, address, and telephone number that could be used to contact them in the event that they won the drawing as there was no other way to identify survey respondents by name. This separate procedure was necessary to preserve the confidentiality of survey respondents. The postcard had a case number on the return address label already attached. This allowed for some additional tracking of response rates by matching returned postcards and returned questionnaires.

The initial mailing allowed three weeks for a response. During this time, 543 completed questionnaires were returned. A reminder postcard was sent to nonrespondents, and 32 more questionnaires were returned. This brought the total of completed questionnaires to 575. Of the 988 questionnaires that were mailed, 35

were returned by the postal service due to incorrect addresses, 7 were returned by persons who were no longer practicing, and 1 was removed from the mailing list as the person was recently deceased. This, in effect, reduced the population to 945 and resulted in a 61% return rate.

An assumption that is often applied to mail-in surveys is that people who have a particular interest in the subject matter or the research itself are more likely to return questionnaires than those who do not (Fowler, 1993). It was assumed that the new continuing education requirement would stimulate a high interest in the study and result in a high rate of return. Fowler suggested that although there is no minimum agreed-upon standard for an acceptable response rate, Babbie (1989), citing "rules of thumb for survey research," noted that a very good response rate is 70%, a good response rate is 60%, and 50% would be considered adequate. Accordingly, the 61% response rate to the survey was considered good.

The known characteristics of gender and graduate degree from the original data base were compared to the remaining group of nonrespondents in an effort to assess sampling bias. Chi-squares of gender and graduate degree indicated no significant difference between the two groups. To further assess bias, a telephone survey was conducted on a random sample of 25 nonrespondents. Telephone numbers were available in the data base supplied by the MDE. Persons were briefly interviewed regarding their participation in the MASP Continuing Education Survey. Of the 25 persons who were contacted, 15 said they believed they had participated in the survey and had returned the questionnaire, 6 persons indicated that the new

requirement did not affect them as they were changing positions (4) or retiring (2), 3 persons could not recall receiving a questionnaire, and 1 person indicated that he never participated in surveys. It was assumed from this effort that more than half of this nonrespondent group believed they had participated in the survey. It was assumed that this reflected a degree of interest in the overall study and the intention to participate, even though they did not actually do so.

Based on the chi-square analysis of the two demographic characteristics of gender and educational level, as well as the results of the telephone survey, there is no evidence to suggest that the respondents should not be considered as representative of the population.

Statistical Analysis

The survey instrument generated a variety of types of data, which called for a variety of statistical tests. Several of the sections involved nominal data, which allow for the use of frequencies, percentages, and the chi-square statistic for analysis. The contingency coefficient (C) was used to provide an index of any relationships derived from the cross-break tables and the chi-square statistic (Fraenkel & Wallen, 1993, pp. 188-89). Although a 5-point Likert-type scale might not accurately represent an interval scale and is more properly called an ordinal scale, it is also arguable that the variable, level of interest, is a continuous variable with an approximately normal distribution in the population. If this is so, it is reasonable to regard the ordinal data collected on the Likert-type items as interval data for statistical purposes (Crocker & Algina, 1986). Therefore, in the analysis,

these data were treated as interval under these assumptions, which allowed the use of analysis of variance (ANOVA) to analyze the level of interest.

Research Questions

The study was designed to answer several questions. They are listed in their order of importance to the investigation:

> Research Question 1: Which option, the six-semester-credit option gained through attending college or university courses, the 18 SBCEUs, or a combination of these two options, do school psychologists prefer in meeting the continuing education requirement?

Operational definition: This was operationalized by using the survey instrument developed for the study to report the responses for each choice in Item 12.

Analysis: The data are reported in frequencies and percentages of the responses for each choice in Item 12.

> Research Question 2: Which type of continuing education sponsor do school psychologists prefer in meeting the new requirement?

Operational definition: *Continuing education sponsor* refers to a local or intermediate school district, college or university, or professional organization such as the MASP. The new state regulations require that certain procedures be completed by an agency to become an approved continuing education sponsor. This was operationalized by using the survey instrument to report the responses for each choice in Items 13b (preferred college or university), 13c (college credit through the MASP), 14d (order of preference among the options), 15c (preferred college or

university), 15d (college credit through the MASP), and 15k (order of preference among options).

Analysis: The responses data are reported in frequencies and percentages of the responses for each choice in Items 13b, 13c, 15c, and 15d. Responses for 14d and 15k are reported by first choice.

Research Question 3: Which type of context do school psychologists prefer in meeting the new requirement?

Operational definition: *Context*, for those choosing the college/university course option or the college/university course portion of the combination option, was defined as a series of short courses on related topics, or courses via television. *Context*, for the 18-SBCEU option or the SBCEU portion of the combination option, was defined as the preferred frequency of programs offering SBCEUs, preferred time span per session, and preferred time of day for session. This was operationalized by using the survey instrument to report the responses to Items 13d (series of short courses), 13e (course by television), 14a (preferred frequency of programs), 14b (preferred time span), 14c (preferred time of day), 15h (preferred frequency of programs), 15i (preferred time span), and 15j (preferred time of day).

Analysis: The data are reported in frequencies and percentages of the responses for each choice in Items 14a, 14b, 14c, 15h, 15i, and 15j.

Research Question 4: Are there existing preferences for type of continuing education option, type of continuing education sponsor, or the context for completing the requirement based on the demographic variables of gender, level of education, years of experience as a school psychologist, geographic location of employment, and type of school setting?

Hypothesis 4: There is no significant difference in preferences between or among groups categorized by gender, degree, location of employment, and school setting.

Operational definition: This was operationalized by using the survey to report the frequencies of responses for each category.

Analysis: The chi-square statistic and the contingency coefficient were used.

Research Question 5: Do school psychologists have release time available from their employers to attend SBCEU activities necessary to complete the continuing education requirement? If so, how much time is available?

Hypothesis 5: There is no significant difference in the amount of reported release time between or among groups categorized by gender, degree, years of experience, location of employment, and school setting.

Operational definition: *Release time* was defined as time away from the normal workday and setting, granted with the employer's knowledge or permission for the purpose of attending an activity designated for continuing education. This was operationalized by using the survey to report the average amount of time for those who responded affirmatively to Item 8.

Analysis: Chi-square, the contingency coefficient, and ANOVA were used to test for relationships, or significant differences, between or among groups categorized by the variables of gender, degree, years of experience, employment location, or school setting.

Research Question 6: Are school psychologists reimbursed by their employers for continuing education activities? If so, how much reimbursement is available?

Hypothesis 6: There is no significant difference in the availability of reimbursement from the employer for continuing education activities between or among groups categorized by gender, degree, years of experience, employment location, and school setting.

Operational definition: *Reimbursement* was defined as the employer paying some or all of the costs, such as tuition, registration fees, lodging, meals, or travel expenses for the employee to attend continuing education activities. Reimbursement was categorized on the survey as either full or partial for conferences and conventions and by the number of credits for tuition. This was operationalized by using the survey to report the responses by the full or partial category in Item 9, and the number of college credits reported for reimbursement in Item 7.

Analysis: The data were analyzed by reporting the frequencies and percentages of the responses for the choices in Items 7 and 9. Chi-square, the contingency coefficient, and ANOVA were used to test these items for relationships or group differences by gender, degree, years of experience, employment location, and school setting as these items contained data that were both nominal and interval.

> Research Question 7: How close to approved sponsors of continuing education opportunities are school psychologists? How far are they willing to travel to participate in continuing education activities?
>
> Hypothesis 7: There are no significant differences in proximity to SBCEU opportunities or in the willingness to travel to participate in them between or among groups categorized by gender, degree, years of experience, employment location, and school setting.

Operational definition: *Distance* was defined in terms of miles divided into five choices of 25-mile increments and ranging from 25 miles or less to more than 100 miles. This was operationalized by using the survey to report the responses to

Items 10a (closest site for college credit), 10b (distance willing to travel for credit), 11a (closest SBCEU site), and 11b (distance willing to travel for SBCEU program).

Analysis: The data were analyzed by reporting the frequencies and percentages of responses to Items 10a, 10b, 11a, and 11b. Chi-square and the contingency coefficient were used to test for relationships by gender, degree, years of experience, employment location, and school setting.

> Research Question 8: Is there interest in developing an area of specialization within the practice of school psychology? If so, in what area--by school age or by disability category?
>
> Hypothesis 8: There is no significant difference in the level of interest in developing a practice specialization by school age or disability category between or among groups categorized by gender, degree, years of experience, employment location, and school setting.

Operational definition: *School age* was defined by the educational divisions of infant, preschool, elementary, middle/junior high, high school, and adult. *Disability categories* are defined by federal and state rules and are very familiar to school psychologists. They include autism, mental impairments, sensory or physical impairments, learning disabilities, and speech and language disorders. This question was operationalized using the survey to report the responses to Items 5d (interest in school-age specialty) and 5e (interest in a categorical disability specialty).

Analysis: The data were reported in frequencies and percentages of the responses to Items 5d and 5e. Chi-square and the contingency coefficient were used to test for a relationship to the choice of specialization by school age or disability category between or among groups categorized by the variables of gender, degree, years of experience, employment location, and school setting.

Research Question 9: What is the level of interest in continuing education topics related to the general categories of expected competencies required in state regulation R380.203, which defines the expected role of school psychologists in Michigan?

Hypothesis 9: There is no significant difference in the mean level of interest in the general competency categories found in state regulation R380.203 between or among groups categorized by gender, degree, years of experience, employment location, and school setting.

Operational definition: *Level of interest* was defined as the choice of rating on the following 5-point Likert-type scale: Very Interested (1), Interested (2), Maybe (3), Not Interested (4), and Definitely Not Interested (5). This was operationalized by using the survey to report the means for each scale in Item 16.

Analysis: ANOVA was used to test for differences in mean level of interest in the general competency categories found in the state regulation between or among groups categorized by gender, degree, years of experience, employment location, and school setting.

Research Question 10: What is the level of interest in specific continuing education topics found in the current literature that relate to the competency areas?

Hypothesis 10: There is no significant difference in the mean level of interest in specific continuing education topics between or among groups categorized by gender, degree, years of experience, employment location, and school setting.

Operational definition: *Current literature* was operationalized as psychological material that has been published in the United States since 1990, and included in publications listed in ERIC and PsychLit data bases. *Level of interest* was defined as the choice of rating on the following 5-point Likert-type scale: Very Interested (1), Interested (2), Maybe (3), Not Interested (4), and Definitely Not

Interested (5). This was operationalized by using the survey to report the means for each scale for all of the questions included in Item 17.

Analysis: ANOVA was used to test for differences in level of interest in specific continuing education topics between or among groups categorized by gender, degree, years of experience, employment location, and school setting.

CHAPTER IV

RESULTS

In addition to providing data with which to answer the research question, the writer also sought to gather demographic information regarding school psychologists in Michigan that might be helpful for planning and development of continuing education opportunities. The demographic data, based on N = 575, provide a context for the survey results.

Demographic Data

The survey instrument contained several sections specifically designed to collect demographic data along with data to answer the research questions. The sections about demographics were titled About You, About Your Place of Employment, and About Your Case Load. This section contains the results from each of the demographic sections of the instrument.

The section **About You** inquired about the respondents' gender, degree level, and years of experience. Of the 575 persons who completed the instrument, 43% (247) were male and 57% (328) were female. Slightly less than one-third of the respondents (31% or 175) reported having a master's degree, 52% (297) had an educational specialist degree, and 18% (100) held a doctoral degree.

The reported number of years of work experience ranged from 1 to 34 years. Data from this item were grouped for analysis into five categories, each representing five-year increments. The work experience reported by respondents is summarized in Table 1.

Table 1: Years of experience as a school psychologist. (N = 551)

Years	Frequency	Percent
1-5 years	78	14.2
6-10 years	109	19.0
11-15 years	150	26.0
16-20 years	121	21.0
21+ years	93	16.0
Missing	24	4.0

The second section, **About Your Place of Employment**, asked for information on the predominant location and setting of the respondents' place of employment. Twenty-seven percent (151) of the respondents reported working in an urban location, 38% (212) in a suburban location, 21% (118) in a rural location, and 15% (82) in a small-town location. Almost all of the respondents (94% or 528) reported working in a public school setting. Only 5% (29) reported working in a special center school, and 1% (7) indicated that they worked in a hospital school, private school, or parochial school.

The section **About Your Case Load** was designed to elicit data on the school age categories served on the respondents' case loads and the special education categorical programs or general education programs receiving their school psychological services. Items in this section inquired further regarding interest in an area of specialization in the delivery of school psychological services either to an age group or a special education program for a specific disability. State of Michigan special education rule R340.1701(d) requires the provision of services from birth through age 26. The reported level of service to school age groups is summarized in Table 2.

Table 2: Case load: School age groups served by respondents. (N = 575)

Age Group	Frequency	Percent
Infant	114	19.9
Preschool	271	47.1
Elementary	498	86.6
Middle/junior high school	406	70.6
High school	339	59.0
Adults	81	14.4

Note: Not all respondents indicated service in all age categories.

Special education programs in Michigan are designated by a categorical label indicating the specific disability area that receives service. Respondents were asked to indicate which categorical programs they serviced. As seen in Table 3, the

frequencies and percentages of the cases were highly concentrated in the following categorical programs: learning disabilities, emotionally impaired, educable mentally impaired, and resource rooms. In addition to their delivery of services to special education programs, slightly more than half (53%) of the 299 school psychologists responding to the survey reported that they serviced general education programs.

Table 3: Case load: Special education categorical programs served by respondents. (N = 575)

Program	Frequency	Percent
Learning disabled	515	89.6
Emotionally impaired	497	86.4
Educable mentally impaired	475	82.6
Resource rooms	418	72.7
Physical or health impaired	281	48.9
Speech and language impaired	268	46.6
Trainable mentally impaired	247	43.0
Preprimary impaired	246	42.8
Autistic impaired	185	32.2
Severely mentally impaired	150	26.1
Severely multiply impaired	136	23.7
Hearing impaired	132	23.0
Visually impaired	94	16.3

Note: Not all respondents indicated service in all age categories.

Respondents were asked to indicate the percentage of time in which they engaged in six broad service areas: evaluation, consultation, curriculum, prevention, intervention, and counseling. Once again, not all respondents indicated participating in all of the areas. The percentage of time reported for each of the areas ranged from 2% to 100%. The average percentage of time respondents reported in these areas is summarized in Table 4. Respondents indicated that evaluation was the most likely service activity, whereas curriculum and prevention activities were the services least likely to be provided.

Table 4: Case load: Mean percentage of time respondents spent in broad service areas. (N = 575)

Service Area	Frequency	Mean Percent of Time
Evaluation	536	59
Consultation	529	20
Counseling	290	11
Intervention	415	10
Prevention	277	8
Curriculum	162	7

Note: Not all respondents indicated service in all service areas.

Results Regarding the Research Questions

The researcher sought to answer several questions regarding school psychologists' choices for meeting the new continuing education requirement, as

well as their interests in various topics that could be used by providers for planning and development of continuing education opportunities. Data were collected on the availability of continuing education opportunities in terms of time, distance, and reimbursement factors. The relationship of the demographic variables of gender, degree, years of experience, employment location, and work setting to the choice of option and the level of interest in these topics was investigated. Results of the data analyses to answer these questions are presented in this section.

Research Question 1

> Which option, the six-semester-credit option gained through attending college or university courses, the 18 SBCEUs, or a combination of these two options, do school psychologists prefer in meeting the continuing education requirement?

The data used to answer this question consisted of the frequencies and percentages of the school psychologists' responses to Item 12a (6 semester hours), 12b (18 SBCEUs), and 12c (credit/SBCEU combination), indicating their choice of option to complete the continuing education requirement. The researcher hypothesized that the results would be similar for each of the three options.

Of the 575 responses to this question (Items 12a, 12b, 12c), 13% (74) respondents chose the six semester hours option, 36% (202) chose 18 SBCEUs, and slightly more than half (51% or 289) indicated they would prefer a combination of credits and SBCEUs. The frequencies and percentages obtained for each of the three options were not similar; they are summarized in Table 5.

Table 5: Respondents' choices of options to complete the continuing education requirement. (N = 565)

Option	Frequency	Percent
Credit/SBCEU combination	289	51.1
18 SBCEUs	202	35.8
Six semester hours	74	13.1

Note: Ten participants did not answer this question.

The results indicated a combination of college credit and SBCEUs as the most likely choice for completing the new continuing education requirement. For more efficient and cost-effective planning and development purposes, it is important to know how many SBCEUs or college credits the respondents to this option might likely complete. The survey instrument asked for that information in Items 15a (number of credits) and 15f (number of SBCEUs) to clarify this point. Of the 264 respondents who answered the question regarding credits, 63% indicated that they would likely take three credits; 14% might enroll for four credits. Although it is possible to enroll for a one- or two-semester-credit class, many college courses offer three or four semester hours of credit. These data suggest that a large majority of respondents (75%) would likely enroll in one college course. The combined data obtained from all who indicated they would likely enroll for college credits yielded a total of 334 respondents (58%) who indicated the likelihood of additional college course work.

Persons who indicated the likelihood of obtaining college credit also were asked whether this credit would be applied to an advanced degree. Of those who chose the six-credit option, 54.3% (38) said yes. In the credit/SBCEU-combination group, 28.5% (78) indicated they would apply the credits to an advanced degree. The responses to these two items were analyzed for their relationship to gender, educational level, years of experience, location of employment, or work setting. Significant effects were obtained for gender, educational level, and years of experience (see Table 6).

Table 6: Credits applied to advanced degree: Demographic effects.

Variable	df	N	χ^2	C	Relationship
Gender	1	344	11.3266*	.1785	Low
Educational level	2	343	22.2437*	.2468	Low
Years of experience	4	325	38.0588*	.3280	Low

Note: C = contingency coefficient, an index of relationship derived from a cross-break table.

*$p < .05$.

The contingency coefficient (C) was used to assess the strength of the relationship within the respective cross-break tables. For the variable of gender (C = .1785), there was a low degree of relationship. Females were more likely than males to use the credits earned toward an advanced degree. There was a low degree of relationship for the variable of educational level (C = .2468).

Approximately two-thirds (172) of those holding a master's degree or an educational specialist degree were not interested in pursuing an advanced degree. For the variable of years of experience, the C-value of .328 suggested a low degree of relationship, as well. Respondents with one to five years of experience were the most likely to use the credits toward an advanced degree. However, they represented only slightly more than half of this category. All other categories of experience indicated an increasing percentage of respondents not interested in this endeavor.

Of those in the combination credit/SBCEUs group, 41% indicated they would likely earn nine SBCEUs. The responses to this item ranged from 2 to 45, which suggested some confusion regarding the new continuing education rule's definition of the credit/SBCEU ratio. The maximum number of SBCEUs allowed is 18. The ratio is one college credit to three SBCEUs. The mean for this item was 8.784, median 9.00, and standard deviation 5.019. However, 75% of the responses fell in the one to nine range of probable SBCEUs.

Research Question 2

> Which type of continuing education sponsor do school psychologists prefer in meeting the new requirement?

Continuing education sponsor referred to either a local school district or an intermediate school district (ISD), college or university, or a professional organization such as MASP. The survey instrument was designed to allow the respondents to select one of the three options of six credits, 18 SBCEUs, or the credit/SBCEU

combination based on their choice of option to fulfill the new certification requirement. Additional data relating to all of the research questions were gathered through the responses of these three groups to survey Items 13a-e (credits), 14a-d (18 SBCEUs), and 15a-k (credit/SBCEU combination). The frequencies and percentages reported to satisfy this research question were obtained by collecting and combining the responses of these three groups to Items 13b (college or university), 13c (credit through MASP), 14d (preferred SBCEU sponsor), 15c (college or university), 15d (credit through MASP), and 15k (preferred SBCEU sponsor).

It was hypothesized that the frequencies or percentages of the school psychologists' choice of continuing education sponsor to complete the continuing education requirement would be similar.

Nine percent (50) of the respondents choosing the six-credit option and 38% (219) of the credit/SBCEU-combination group indicated that they would likely enroll in an MASP-sponsored activity that was offered for college credit. This represents 47% of the total number of respondents.

The respondents in the six-credit group and the credit/SBCEU-combination group also were asked to indicate a college or university they might likely attend to obtain credit. A total of 402 responses were collected, which constituted 77% of the total group. The frequencies and percentages of the colleges or universities chosen are summarized in Table 7.

Table 7: Colleges or universities respondents were likely to attend for continuing education credit.

Institution	Frequency	Percent
Wayne State University	65	16.0
Western Michigan University	58	14.0
Michigan State University	54	13.0
Eastern Michigan University	53	13.0
Central Michigan University	49	12.0
Other Michigan colleges	30	7.5
Grand Valley State University	28	7.0
University of Detroit	26	6.0
University of Michigan	21	5.0
Oakland University	9	2.0
Saginaw Valley State University	5	1.0
Out of state college/university	4	<1.0

The groups choosing either the 18 SBCEUs or the credit-SBCEU combination were asked to rank order their choice of sponsor. The responses of the two groups, by first choice, are summarized in Table 8.

The frequencies and percentages obtained from the three groups regarding their choice of sponsor, whether for credit or SBCEUs, were not similar. Of those seeking the credit option, a sizable percentage would likely attend an MASP-sponsored activity offered for college credit. Of the respondents choosing SBCEUs for all or a portion of the way to satisfy the continuing education requirement, 47%

appeared more likely to attend a locally sponsored activity. Slightly more than one-fourth, 27%, would attend a program offered through an organization.

Table 8: Respondents' first choice of continuing education sponsor for SBCEUs.

Sponsor	Frequency	Percent
18-SBCEU Group (n = 192)		
Local	125	65.1
Institution	5	4.2
Organization	59	30.7
Credit/SBCEU-Combination Group (n = 284)		
Local	143	50.4
Institution	46	16.2
Organization	95	32.9
Combined 18-SBCEU and Credit/SBCEU Groups (n = 376)		
Local	269	47
Institution	54	9
Organization	154	27

Research Question 3

Which type of context do school psychologists prefer in meeting the new requirement?

Context, for those choosing the college/university-credit option or the college/university-credit portion of the combination option, was defined as a series of short courses on related topics, or courses via television. *Context*, for the 18-SBCEU option or the SBCEU portion of the combination option, was defined as preferred frequency of programs offering SBCEUs, preferred time span per session, and preferred time of day for session.

The survey instrument was designed to allow the respondents to select one of the three options of six credits, 18 SBCEUs, or the credit/SBCEU combination as their choice to fulfill the new certification requirement. The responses relating to the context from Items 13d (series of short courses), 13e (course by television), 14a (preferred frequency of SBCEU programs), 14b (preferred time span), 14c (preferred time of day), 15e (series of short courses), 15g (course by television), 15h (preferred frequency of SBCEU programs), 15i (preferred time span), and 15j (preferred time of day) were collected and combined, and their frequencies and percentages were reported to answer this research question.

The six-credit group (n = 71) indicated a strong likelihood (76% or 54) of attending a series of short courses developed around a central topic. Slightly more than half of this group (55% or 39) indicated interest in courses offered via television.

In the credit/SBCEU combination group, 286 respondents answered the credit-context questions. A large percentage (83% or 229) indicated that they would likely enroll in a series of short courses to satisfy the new continuing education requirement. And 55% (155) indicated interest in courses via television.

The combined data from the two groups (n = 357) indicated that 81% (290) would likely enroll in a series of short courses developed around a central theme and that 55% (194) would likely enroll in a television course.

The frequencies and percentages of the type of context preferred by those interested in college credit for the two groups, singularly and in combination, were very similar.

The context for the 18-SBCEU group and the credit/SBCEU-combination group included data on the preferred frequency of programs, preferred length of program, and the preferred time of day. Data from the 18-SBCEU group are summarized as follows: 73% (142) preferred a monthly program, full-day sessions were preferred by 60% (119), and a daytime program was chosen by 87% (168). The credit/SBCEU group indicated the following preferences for SBCEU programs: 53% (153) would like a monthly program, 43% (117) liked full-day sessions, and 62% (172) preferred a daytime program.

The combined data from the two groups indicated that 63% (195) preferred a monthly program, 50% (236) preferred a full-day session, and 72% (340) preferred a daytime format.

The data from the groups, both singularly and combined, indicated some differences in percentages in regard to the preferred context for SBCEUs. However, the choices made by the groups as to the preferred frequency of SBCEU programs and the preferred time of day for programs were all similar. These choices represented a majority of responses in these two preference categories. The frequencies and percentages of the preferred choice for length of session were different for each group. The data from the combined responses of both groups to this question indicated that about 50% of those who preferred to obtain SBCEUs would prefer a full-day session, whereas the other 50% would prefer another option.

Research Question 4

> Are there existing preferences for type of continuing education option, type of continuing education sponsor, or the context for completing the requirement based on the demographic variables of gender, level of education, years of experience as a school psychologist, geographic location of employment, and type of school setting?

The demographic data gathered by means of the survey instrument included respondents' answers to the several variables noted in the research question. Further, this writer looked at the relationship of these demographic variables to the options chosen by the respondents to satisfy the new continuing education requirement, as well as their levels of interest in various topics for continuing education opportunities.

The relationship of the demographic variables to the choice of option (six credits, 18 SBCEUs, or a credit/SBCEU combination) was analyzed using chi-square and the contingency coefficient for the strength of the relationship. No relationship to the choice of option was shown by the variables of gender or work setting. The results that indicated a significant relationship between choice of option and the variables of educational level, years of experience, and location of employment are shown in Table 9.

Approximately half of those persons holding a master's degree and well over half of those with an educational specialist degree chose the credit/SBCEU combination. This was in contrast to those holding a doctorate, of whom only 40% were interested in this option. Of those holding a doctoral degree, approximately 50% indicated a preference for the 18-SBCEU option.

Table 9: Choice of continuing education option: Demographic effects.

Variable	df	N	χ^2	C	Relationship
Educational level	4	562	13.2820*	.1514	Low
Years of experience	8	541	16.0987*	.1735	Low
Employment location	6	553	17.1508*	.1764	Low

Note: C = contingency coefficient, an index of relationship derived from a cross-break table.

*$p < .05$.

Well over one-half of the persons in the 1- to 5-year, 6- to 10-year, and 16- to 20-year work experience groups chose the credit/SBCEU-combination option. Persons in the 16- to 20-year work experience group were the least interested in the six-credit option.

Slightly less than one-half of those working in suburban locations preferred the credit/SBCEU option, in contrast to well over 50% of respondents from all other locations who indicated this preference.

A significant relationship with the choice of MASP as a sponsor for continuing education opportunities offered for college credit was found for gender and work setting. These results are summarized in Table 10. Females were significantly more likely than males to indicate this preference. Those who worked in a public school setting were also significantly more likely to prefer MASP as a sponsor for college credit.

Table 10: Choice of MASP as a sponsor for continuing education for college credit: Demographic effects.

Variable	df	N	χ^2	C	Relationship
Gender	1	359	18.4913*	.2211	Low
Work setting	6	355	17.7648*	.2183	Low

Note: C = contingency coefficient, an index of relationship derived from a cross-break table.

*p < .05.

Gender, years of experience, and location of employment all showed a significant relationship to the *first choice* for type of sponsor for SBCEU opportunities. The results are shown in Table 11. Gender showed a very low degree of relationship as estimated by C = .120. Years of experience also showed a low degree of relationship, C = .2024. Location of employment was weakly related to sponsor choice, C = .1723, but not as weakly as gender.

Table 11: First choice of SBCEU sponsor: Demographic effects.

Variable	df	N	χ^2	C	Relationship
Gender	1	476	5.8145*	.1201	Low
Years of experience	8	454	19.4661*	.2024	Low
Employment location	6	468	14.4175*	.1723	Low

Note: C = contingency coefficient, an index of relationship derived from a cross-break table.

*p < .05.

The respondents ranked their preferences for an organizational, institutional, or local sponsor for SBCEUs. The data from the cross-break table revealed that both males and females were equal in their preference of an organizational sponsor. However, males were less likely than females to choose an institutional sponsor. Females were more likely than males to choose a local sponsor.

The cross-break table for years of experience and first choice of sponsor for SBCEUs showed that percentages among all work experience groups increased as years of experience increased, with regard to the choice of a local sponsor for SBCEUs, beginning with slightly less than one-half of the 1- to 5-year group and culminating with 70% of the 21+-year group.

The cross-break table for first choice of sponsor revealed that more than one-half of all persons in each of the employment locations indicated a preference for a local sponsor to offer SBCEUs.

Significant relationships for the preferred context for college credit were found between the demographic variables and a series of short courses and courses by television. One preferred context, a series of short courses, for those choosing college credit as an option was significantly related to the variables of gender (χ^2 [df = 4, N = 357] = 31.0352, $p < .05$), educational level (χ^2 [df = 8, N = 357] = 17.3036, $p < .05$), and work setting (χ^2 [df = 8, N = 353] = 36.8497, $p < .05$). Contingency coefficients for each variable (C = .2945, C = .2155, and C = .3073, respectively), indicated a low degree of relationship.

Seventy-three percent of the respondents who indicated they were very likely to enroll in a series of short courses were female. Persons with an educational specialist degree were more likely than those from other educational levels to indicate interest in a series of short courses. More than one-half of the persons working in a public school setting chose this option.

A second context preference, courses by television, was investigated among those who indicated a college-credit option. No significant relationships were evident in the data between a preference for courses via television and the five independent variables.

For those choosing the SBCEU option, significant relationships were found between the preferred time span for programs and the preferred time of day and the variable of location of employment. The preferred time span (χ^2 [df = 9, N = 465] = 20.0458, p < .05) had a weak relationship with location of employment as estimated by the contingency coefficient, C = .2032. The relationship between preferred time of day and location of employment (χ^2 [df = 9, N = 463] = 20.4909, p < .05) also was weak, as estimated by the contingency coefficient, C = .2063.

Well over one-half of persons working in urban or suburban locations indicated a preference for a full-day time span. A large percentage of persons from all of the work locations indicated that they preferred programs to be held during the daytime.

The research hypothesis of no significant difference in preferences based on the demographic variables of gender, degree, location of employment, and type of

school setting was retained for the six-credit-option group. For the SBCEU group, there was a statistically significant relationship between location of employment and the preferred time span for programs and the preferred time of day for them to be held.

Research Question 5

> Do school psychologists have release time available from their employers to attend SBCEU activities necessary to complete the continuing education requirement? If so, how much time is available?

The research hypothesis proposed no significant difference in the amount of reported release time according to the variables of gender, degree, years of experience, employment location, or school setting. The survey instrument was used to elicit the average amount of time of those who responded affirmatively to Item 8. *Release time* was defined as time away from the normal workday and setting, granted with the employer's knowledge or permission for the purpose of attending an activity designated for continuing education.

A very large percentage (92.3% or 525) reported that they did have release time. Well over 85% of persons in all work locations indicated that they had release time to attend conferences or conventions. However, not all of the respondents who answered this item affirmatively provided an answer to the second item, which inquired how much time was available. The amount of release time reported is summarized in Table 12.

A statistically significant relationship was found between the availability of release time and the variable of educational level (χ^2 [df = 2, N = 566] = 11.3598, p <

.05). However, the relationship was only a weak one (C = .1402). Of those persons answering affirmatively, well over one-half held an educational specialist degree. More than half of those with a master's degree said they did not have conference or convention leave time.

Table 12: Amount of release time to attend conferences or conventions. (N = 247)

Release Time (Days)	Frequency	Percent
1	11	4.5
2	55	22.3
3	54	21.9
4	46	18.6
5	48	19.4
6+	33	13.4

Note: There were 328 missing cases.

The variable of work location also showed significance (χ^2 [df = 3, N = 557] = 14.9810, p < .05). This relationship between the availability of release time for continuing education activities and location of employment was quite low (C = .1593).

As seen in Table 13, the ANOVA results revealed a significant relationship between the amount of release time available and level of education. No significant relationships were found with regard to the other variables. Thus, the research hypothesis was rejected for this variable and retained for the others.

Table 13: Release time: Demographic effects.

Educational Level	Mean	SD
Master's degree	3.5902	2.0471
Educational specialist	3.7554	1.8200
Doctoral degree	4.7660	2.7992

Note: ANOVA results revealed a significant difference ($E\ [df = 2,2] = 5.439$, $p < .05$).

Research Question 6

Are school psychologists reimbursed by their employers for continuing education activities? If so, how much reimbursement is available?

Reimbursement was defined as the employer paying some or all of the costs, such as tuition, registration fees, lodging, meals, or travel expenses, for the employee to attend continuing education activities. Reimbursement was categorized on the survey as either full or partial for conferences and conventions and by the number of credits for tuition. Data were collected by means of the survey instrument in the responses to the full or partial category sections in Item 9, and the number of college credits reported for reimbursement in Item 7.

More than three-fourths of the respondents (77% or 435) indicated that they did **not** have tuition reimbursement for college credit. For those respondents who answered affirmatively to this question (23% or 127), the amount of tuition reimbursement available ranged from one to six credits. A very small number (8) reported availability of reimbursement for more than six credits. The mean number of reimbursed credits reported was 5.622, with a standard deviation of .497.

Reimbursement for conference/convention purposes was reported by 72% (406) of the respondents. Half of the persons answering affirmatively (51% or 205) indicated they had partial reimbursement to attend these activities. Thirty-eight percent (153) reported receiving full reimbursement. The remaining 48 persons reported no availability of reimbursement.

There was no significant relationship between the availability of tuition reimbursement and the variables of gender, educational level, years of experience, location of employment, or work setting. As a result, the research hypothesis was retained for this portion of the question.

Significant relationships were found between the variables of gender and location of employment and the availability of conference/convention reimbursement. The results are summarized in Table 14. For gender, the result was statistically significant; however, the degree of relationship was low ($\underline{C}$ = .123). Whereas the cross-break table percentages of those answering yes to the question of reimbursement were about even between males and females, more than two-thirds of the individuals who said they did **not** have reimbursement were females. The relationship between location of employment and the availability of conference/ convention reimbursement also was statistically significant. Again, the contingency coefficient ($\underline{C}$ = .370) suggested a low degree of relationship. Persons from suburban and rural work locations were more likely to have reimbursement from their employers to attend these activities than were those who worked in urban or small-town locations. More than half of those who responded that they did **not** have

reimbursement worked in an urban location. These results are summarized in Table 14.

Table 14: Availability of conference/convention reimbursement: Demographic effects.

Variable	df	N	χ^2	C	Relationship
Gender	1	563	8.7322*	.1232	Low
Employment location	3	551	87.5016*	.3701	Low

Note: C = contingency coefficient, an index of relationship derived from a cross-break table.

*$p < .05$.

No significant relationships were found between any of the five independent variables and the availability of either full or partial reimbursement, based on the chi-square statistics. Thus, the research hypothesis was retained for this question.

Research Question 7

How close to approved sponsors of continuing education opportunities are school psychologists? How far are they willing to travel to participate in continuing education activities?

Distance was defined in terms of miles divided into five choices of 25-mile increments and ranging from 25 miles or less to more than 100 miles. To address this issue, data were analyzed for all responses to Items 10a (distance to approved site for credit), 10b (distance willing to travel for credit), 11a (distance to approved site for SBCEUs), and 11b (distance willing to travel for SBCEUs). Very limited data

were collected in the response categories for distances beyond 50 miles. Accordingly, the responses to those items were combined and analyzed as 50+ miles. The results of respondents' choosing either credit or SBCEUs were combined into two categories and further analyzed for any effects of gender, level of education, years of experience, location of employment, or work setting.

Sixty-one percent (346) of the respondents reported being 25 miles or less from the closest site for college credit. Approximately 22% (122) reported being 25 to 50 miles or less from a college or university site.

Significant relationships were found between the variables of gender and location of employment and the proximity to an approved site for obtaining college credit to satisfy the new continuing education requirement. The results are shown in Table 15. The contingency coefficient (C = .102) was very low for gender but somewhat stronger for location of employment (C = .3888).

Table 15: Proximity to continuing-education-approved college or university: demographic effects.

Variable	df	N	χ^2	C	Relationship
Gender	1	561	5.9410*	.1025	Low
Employment location	6	549	97.3509*	.3888	Low

Note: C = contingency coefficient, an index of relationship derived from a cross-break table.

*$p < .05$.

Of those who reported they were within the 26- to 50-mile range, more than two-thirds were female. The results indicated that urban and suburban work locations were more likely to be within a 25-mile or less proximity to a college or university site. A suburban location was most likely to be within 50 miles or less, and some rural respondents more than 50 miles. These data confirmed what might be logically expected, based on the geographic location of the many Michigan colleges and universities and the distribution of the population of school psychologists.

Forty-two percent (237) of the respondents indicated that they would be willing to travel 25 miles or less to obtain college credit. Thirty-five percent (202) reported a willingness to travel 50 miles or less to obtain credit.

No statistically significant relationships were found between the independent variables of gender, level of education, and work setting and the willingness to travel to obtain credit. Table 16 contains a summary of the relationships that were statistically significant.

Table 16: Willingness to travel for credit: Demographic effects.

Variable	df	N	χ^2	C	Relationship
Years of experience	8	535	16.1695*	.1723	Low
Employment location	6	547	50.9850*	.2913	Low

Note: C = contingency coefficient, an index of relationship derived from a cross-break table.

*$p < .05$.

Although significant relationships were found for years of experience and location of employment, in each case the relationship was low (C = .1723 and .2914, respectively). These data suggest that persons working in urban or suburban locations were about even in their willingness to travel either 25 miles or less or up to 50 miles to obtain credit. Respondents in a rural or small-town location indicated more willingness to travel longer distances. Of these two groups, persons from small towns were more likely to travel 50 miles or less and those working in rural locations were evenly divided in their willingness to travel 50 miles or less or more than 50 miles to obtain credit.

Seventy percent (364) of the respondents indicated that they were 25 miles or less from the closest site to obtain SBCEUs. And 18% (93) reported being 50 miles or less from the closest site for SBCEUs.

No significant relationships were found between the variables of gender, educational level, and work setting and the proximity to a continuing-education-approved site for SBCEUs. As shown in Table 17, significant relationships were found for the variables of years of experience and location of employment. Although these relationships were statistically significant, their degree of relationship was low.

More than half of the respondents working in rural and small-town locations reported a proximity of 25 miles or less as the closest SBCEU site. Well over three-fourths of those working in both urban and suburban locations reported being within 25 miles or less of an SBCEU site. The research hypothesis was rejected for the

variables of years of experience and location of employment; it was retained for the variables of gender, educational level, and work setting.

Table 17: Proximity to continuing-education-approved SBCEU site: Demographic effects.

Variable	df	N	χ^2	C	Relationship
Years of experience	8	497	16.3015*	.1782	Low
Employment location	6	507	45.5741*	.2871	Low

Note: C = contingency coefficient, an index of relationship derived from a cross-break table.

*$p < .05$.

The respondents were more evenly divided in their reported willingness to travel to obtain SBCEUs. One-third (34.7% or 194) were willing to travel 25 miles or less, approximately one-third (31.5% or 176) were wiling to travel 50 miles or less, and the remaining individuals were willing to travel more than 50 miles to obtain SBCEUs.

No significant relationships were found between the variables of gender, years of experience, or work setting and willingness to travel for SBCEUs. As shown in Table 18, both level of education and location of employment yielded statistically significant results. Both relationships were weak, however (C = .1272 and .3349, respectively).

Table 18: Willingness to travel for SBCEUs: Demographic effects.

Variable	df	N	χ^2	C	Relationship
Educational level	4	556	9.1497*	.1272	Low
Employment location	6	547	69.3516*	.3349	Low

Note: C = contingency coefficient, an index of relationship derived from a cross-break table.

*$p < .05$.

Approximately one-half of the persons indicating a willingness to travel in any of the distance categories held an educational specialist degree. Slightly less than half of those with a doctoral degree said they would be willing to travel 25 miles or less to obtain SBCEUs.

More than one-half of the suburban respondents indicated a willingness to travel 25 miles or less to obtain SBCEUs. Approximately one-third of the urban group indicated a similar willingness. Approximately one-half of the small-town group and more than one-half of the rural group were willing to travel more than 50 miles to obtain the required SBCEUs.

The research hypothesis of no significant differences in the willingness to travel to participate in SBCEU activities based on the variables of gender, educational level, years of experience, employment location, and school setting was supported for gender, years of experience, and work setting; it was rejected for educational level and location of employment.

Research Question 8

> Is there interest in developing an area of specialization within the practice of school psychology? If so, in what area–by school age or by disability category?

School age was defined by the educational divisions of infant, preschool, elementary, middle/junior high, high school, and adults. *Disability categories* are defined by federal and state rules, and school psychologists are very familiar with them. Categories include autism, mental impairments, sensory or physical impairments, learning disabilities, emotional impairments, and speech and language disorders. The data for this question were obtained by using the survey instrument to elicit responses to Items 5d (interest in a school age specialty) and 5e (interest in a disability categorical specialty). The results were analyzed for any significant differences in level of interest in developing a practice specialization by school age or disability category according to the variables of gender, degree, employment location, or school setting.

On the survey instrument, school psychologists were asked whether they had an interest in developing or furthering a specialty, either by school age group or special education categorical area, in their service delivery. Of the 550 persons who responded, approximately two-thirds (62% or 342) indicated an interest in a school age specialty. The choices of school age group of the 342 respondents who answered this item affirmatively, by frequency and percentage of cases, are shown in Table 19.

Table 19: Respondents' interest in a school age group specialty.

School Age Group	Frequency	Percent of Responses	Percent of Cases
Infants	80	9.4	23.4
Preschool	127	15.0	37.1
Elementary	130	15.3	38.0
Middle/junior high	85	10.0	24.9
High school	63	7.4	18.4
Adults	21	2.5	6.1

Note: There were 342 valid cases and 848 total responses to the question as some persons chose more than one category.

Further analysis indicated no significant relationship between the variables of level of education or location and interest in developing a school age specialty. Gender was statistically significant (χ^2 [df = 1, N = 550] = 6.51139, $p < .05$), but there was a low degree of relationship (C = .1081). Cross-tabulations of the choice of a school age category by gender showed an interesting pattern, however. Females were more interested in an infancy or preschool specialization than were males. On the other hand, males and females were fairly even in their choices of the other school age categories as possible areas of specialization. Cross-tabulations of years of experience and the choice of school age category indicated that individuals in the 11- to 15-year range of experience were most strongly represented in the choice of a specialty across all age categories. Although statistical significance was not obtained for this variable, cross-tabulations of the choice of a school age

specialty and level of education revealed that, of the choices for any age category, half were made by persons holding an educational specialist degree.

With regard to an interest in developing or furthering a specialty in a special education category, 529 of the respondents answered this item. Slightly more than half of the school psychologists (53% or 282) answered affirmatively. Table 20 reflects their choice of special education categorical areas by frequency and percentage of cases.

Table 20: Respondents' interest in special education categorical areas.

Category	Frequency	Percent of Responses	Percent of Cases
Emotionally impaired	110	14.6	39.0
Learning disabled	110	14.6	39.0
Autistic impaired	74	9.8	26.2
Preprimary impaired	70	9.3	24.8
Speech & language impaired	17	2.2	6.0
Hearing impaired	17	2.2	6.0
Physical or health impaired	16	2.1	5.7
Educable mentally impaired	12	1.6	4.3
Trainable mentally impaired	10	1.3	3.5
Severely multiply impaired	10	1.3	3.5
Visually impaired	8	1.1	2.8
Severely mentally impaired	7	.9	2.5

Note: There were 282 valid cases and 756 total responses to the question as some persons chose more than one category.

Statistically significant relationships were found between the variables of gender, educational level, and years of experience and the level of interest in a special education disability category specialty. These results are summarized in Table 21.

Table 21: Interest in a special education disability category specialty: Demographic effects.

Variable	df	N	χ^2	C	Relationship
Gender	1	529	7.0785*	.1149	Low
Educational level	2	526	8.5112*	.1261	Low
Years of experience	4	509	10.5414*	.1424	Low

Note: C = contingency coefficient, an index of relationship derived from a cross-break table.

*$p < .05$.

Although the variable of gender was statistically significant, the contingency coefficient (C = .1149) indicated a low degree of relationship. Females were somewhat more likely than males to indicate an interest in this type of specialty. The variable of educational level also reached statistical significance, and again the contingency coefficient (C = .1261) indicated a low degree of relationship. Cross-tabulations revealed that persons holding a master's degree were more interested in specialization, whereas those holding either an educational specialist or a doctoral degree were fairly evenly divided in their level of interest in a special education categorical specialty. The variable of years of experience was statistically significant

as well, but the contingency coefficient (C = .1424) suggested that this relationship also was low.

A larger percentage, approximately two-thirds, of the persons in the 1- to 5-year and 6- to 10-year experience groups indicated an interest in a special education categorical specialty, whereas about half of those in the 11- to 15-year experience group expressed an interest in this area. More than half of the persons in both the 16- to 20-year and 21+-year groups said they were not interested in a special education categorical specialty.

The research hypothesis of no significant differences in interest in developing or furthering a specialty in a disability category between or among groups categorized by the five demographic variables was retained for location of employment and rejected for gender, educational level, and years of experience.

In their earlier national study, Reschly and Connolly (1990) found limited support for the existence of a more generalist role for school psychologists employed in rural locations, as well as more involvement in regular education issues. They suggested that the continuing education needs of persons employed in different settings, such as rural location as opposed to urban or suburban, may be different.

The demographic data collected in this study regarding school psychologists who reported working in a rural location were analyzed to shed further light on this question. Twenty-one percent (118) of the respondents in this study reported working in a rural area. All respondents to the questionnaire were asked to indicate which school category and which special education programs they serviced as part

of their case load. Analysis of the work-location data revealed that persons in rural areas reported provision of service in all of the school age categories and all of the special education categorical areas. (See Tables 22 and 23 for a summary of these data.) Although these frequencies and percentages indicate a different pattern as compared to the results obtained from the study as a whole (see Tables 2 and 3), they suggest that, in rural areas, school psychologists may indeed be practicing more as generalists within the school age populations and the special education categorical programs as compared to their colleagues in other work locations. These results indicate some additional support for the generalist role among rural school psychologists in the provision of service by school age and disability category.

Table 22: Case load: School age groups served, rural location.

Age Group	Frequency	Percent of Cases
Infant	34	8.0
Preschool	60	13.8
Elementary	114	26.1
Middle/junior high	104	23.9
High school	102	23.4
Adults	22	5.0

Note: There were 118 valid cases and 436 responses to this item. Not all persons indicated service in all age categories.

Table 23: Case load: Special education categorical programs served, rural location.

Age Group	Frequency	Percent of Cases
Educable mentally impaired	107	7.4
Learning disabled	107	13.0
Emotionally impaired	102	12.4
Resource rooms	102	12.4
Preprimary impaired	61	7.4
Physical or health impaired	60	7.3
Trainable mentally impaired	59	7.2
Speech & language impaired	48	5.8
Autistic impaired	47	5.8
Severely mentally impaired	42	5.1
Severely multiply impaired	39	4.1
Hearing impaired	29	3.5
Visually impaired	21	2.5

Note: There were 118 valid cases and 824 responses to this item. Not all persons indicated service in all age categories.

Respondents also were asked whether they provided service to general education programs. Although 52% of all persons responding answered affirmatively, only 41% of those working in rural locations reported this activity.

In summary, these results suggest that school psychologists working in rural locations were indeed serving in a more generalized role as compared to those employed in other locations. They spent more of their time in special education as compared to regular education, in contrast to their counterparts in other locations.

Research Question 9

What is the level of interest in continuing education topics related to the general categories of expected competencies required in state regulation R380.203, which defines the expected role of school psychologists in Michigan?

Level of interest was defined as the choice of rating on a five-point Likert-type scale ranging from Very Interested (1) to Definitely Not Interested (5). The data to answer this question were gathered using the survey instrument to report the means for each scale in Item 16. State Regulations R340.1151 and R340.1156 are included in their entirety in Appendix D. The general competency categories are assessment, consultation, counseling, curriculum, intervention, and prevention. A summary of the responses to Item 16 in frequencies and percentages of cases is shown in Table 24.

Table 24: Respondents' level of interest in broad competency areas.

Category	Level of Interest (Percent of Cases)				
	Very Interested	Interested	Maybe	Not Interested	Definitely Not Interested
Assessment (N = 563)	35.3	39.8	19.2	4.4	1.2
Consultation (N = 570)	47.0	39.1	11.2	2.1	.5
Counseling (N = 556)	36.2	31.7	22.1	7.9	2.4
Curriculum (N = 562)	15.6	27.0	31.5	21.0	4.9
Intervention (N = 566)	58.7	35.0	4.9	.7	.7
Prevention (N = 565)	52.9	31.9	12.4	1.4	1.4

Note: The Ns for this item differ because not all persons responded to each category.

A combination of the Very Interested and Interested results revealed high levels of interest on the part of the respondents in intervention (93%), consultation (86%), prevention (85%), and assessment (75%). A strong level of interest was shown in counseling (68%). A relatively low level of interest in curriculum, as compared to other competency areas, was indicated by 43% of the respondents.

Under the rationale provided by Crocker and Algina (1986), the variable of level of interest was assumed to be continuous with a normal distribution. This allowed the researcher to treat the data collected through the Likert-type items on the questionnaire as interval for statistical purposes. ANOVA was used to analyze the mean level of interest in the general competency categories found in the Michigan state regulations according to groups categorized by gender, degree, employment location, and school setting. The means and standard deviations for the level of interest in broad competency categories are shown in Table 25.

Table 25: Respondents' level of interest in broad competency areas.

Category	Mean	SD
Assessment	1.964	.039
Consultation	1.702	.033
Counseling	2.083	.044
Curriculum	2.726	.047
Intervention	1.498	.029
Prevention	1.665	.036

Note: The Likert scale was set with the lower numbers indicating the highest level of interest.

For the variable of gender, significant results were found for the following categories: consultation (E [df = 1] = 4.280, p < .05), curriculum (E [df = 1] = 5.233, p < .05), intervention (E [df = 1] = 12.023, p < .05), and prevention (E [df = 1] = 21.782, p < .05). For the variable of educational level, significant results were found for the following categories: assessment (E [df = 2] = 3.204, p < .05), curriculum (E [df = 2] = 6.581, p < .05), intervention (E [df = 2] = 2.993, p < .05), and prevention (E [df = 2] = 4.1888, p < .05). For the variable of years of experience, significant results were found for the assessment category (E [df = 4] = 2.756, p < .05). A summary of these data is provided in Table 26.

Table 26: Interest in broad service competencies: Demographic effects.

Variable	df	Frequency	E
Assessment			
Educational level	2	563	3.204*
Years of experience	4	543	2.756*
Consultation			
Gender	1	560	4.280*
Curriculum			
Gender	1	552	5.233*
Educational level	2	549	6.581*
Intervention			
Gender	1	566	12.023*
Educational level	2	563	2.993*
Prevention			
Gender	1	565	21.782*
Educational level	2	562	4.188*

Note: Ns vary because not all persons answered all items on the questionnaire.

*p < .05.

The results did reveal significant differences in the mean level of interest in the general competency categories found in Michigan state regulations R340.1151 and R340.1156, according to the variables of gender, level of education, and years of experience. Thus, the research hypothesis was rejected for these groups. The hypothesis was supported for the variables of location of employment and work setting.

Research Question 10

What is the level of interest in specific continuing education topics found in the current literature that relate to the competency areas?

The term *current literature* was operationalized as material that has been published since 1990. The content of the questions represented various topics suggested in the literature that could be used to develop continuing education offerings either for credit or for SBCEUs. The data to answer this question were obtained using the survey instrument to report the means for each scale for all of the questions that were part of Item 17 on the questionnaire. These data also were treated as interval under the Crocker and Algina (1986) rationale. ANOVA was used to analyze the mean level of interest in the specific topics.

Table 27 contains a summary of the means and standard deviations for each of the individual topics. The rankings of specific interest show questions related to certain types of consultation and assessment to be at the highest levels, whereas interest in counseling or curriculum-related activities showed a more moderate level. Consultation, whether it be with families or of a prereferral nature, ranked highest,

followed closely be interest in neuropsychological assessment and behavioral/ classroom management. Pediatric psychopharmacology also ranked high. Timely topics such as authentic assessment and inclusion were of moderate interest. Interest in the gifted, research, and bilingual assessment ranked lowest among the psychologists' interests.

Table 27: Ranking of psychologists' interest in specific topics.

Topic	Mean	SD
Consultation	1.88	.89
Consultation with families	1.93	.91
Prereferral consultation	1.96	.96
Neuropsychological assessment	2.08	1.08
Behavioral and classroom management	2.15	.95
Clinical assessment using DSMIII-R	2.25	1.12
Pediatric psychopharmacology	2.25	1.11
Personality assessment	2.27	1.07
Parenting education	2.28	1.05
Developing peer intervention	2.35	1.01
Curriculum-based assessment	2.35	1.08
Preschool assessment	2.37	1.17
Alternative service models	2.38	1.02
Cognitive behaviors therapy	2.41	1.12
Group counseling methods	2.44	1.13
Consultation with physicians	2.45	1.00
Computer skills	2.57	1.17
Authentic assessment	2.58	1.05
Inclusion models	2.59	1.04

Table 27: Continued.

Topic	Mean	SD
Outcome-based education	2.60	1.08
Consultation with mental health agencies	2.64	1.02
Curriculum planning	2.65	1.08
Program evaluation methods	2.65	1.06
School restructuring	2.65	1.06
Student assistance programs	2.66	1.06
Human growth and development	2.68	1.00
Counseling methods	2.71	1.26
Infant assessment	2.77	1.30
Collaboration with social agencies	2.84	.98
Cultural and ethnic differences	2.87	1.06
Low-incidence assessment	2.91	1.06
Special needs of the gifted	3.07	1.11
Research design and analysis	3.08	1.15
Bilingual assessment	3.37	1.19

The results were analyzed for significant differences in the mean level of interest in specific continuing education topics according to gender, educational level, years of experience, employment location, and school setting. A summary of the significant findings is presented in Tables 28 through 34, found in Appendix D.

Significant differences were found in level of interest in specific continuing education topics according to gender, educational level, years of experience, employment location, and school setting. Thus, the research hypothesis was

rejected. Unfortunately, although these results have statistical significance, they may not have practical significance.

A summary and discussion of the findings may be found in Chapter V.

CHAPTER V

SUMMARY AND DISCUSSION OF FINDINGS

This study was conducted to provide information for the planning and development of continuing education opportunities for school psychologists in Michigan. Regulations adopted by the state in 1992 require the completion of specific continuing education requirements as a condition of maintaining the proper certification for practice. The choice of options to complete the continuing education requirement along with a consideration of the factors of preferred sponsor, preferred context, release time, reimbursement from an employer, and willingness to travel to participate in a continuing education activity were investigated. The investigator also considered the level of interest in developing a specialty in the delivery of services, either by school age or disability category. Recent literature in the field has centered on the development of a broader role in the delivery of school psychological services. The writer investigated the level of interest in the broad competency areas, found in state regulations for school psychologists, which can be used to define the expanded role. The level of interest in specific topics as suggested in current literature, which could be used in planning and development of conferences, workshops, or college courses, was investigated as well. Finally, the researcher

studied the relationship between gender, educational level, years of experience, location of employment, and work setting and the preferences and interest levels of the school psychologists who participated in the study.

From the three options found in the new state rules to complete the continuing education requirement, more than half of the school psychologists responding chose a combination of college credit and SBCEUs as their preferred method to complete the new requirement. However, for planning and development purposes, it is important to consider that, whereas only a small number of respondents chose the six-credit option and about one-third chose the 18-SBCEU option, the question remains whether to offer continuing education opportunities for college credit or SBCEUs.

The combined responses of those who indicated some interest in college credit represented a sizable percentage of interest in at least one college course. The choice of which college or university most likely to be attended for the credit was not evenly divided among the respondents (see Table 7, p. 67). All of the institutions mentioned by respondents in the survey had either a college of education or a department of education. Most had a department of psychology. Not all of them had school psychology training programs. The new state rule does not specify what type of course would be acceptable, nor does it indicate whether the course work must be exclusively at the graduate level. This might make the planning and development of postgraduate course offerings that would attract sufficient enrollment more challenging than sponsoring a conference or workshop offered for SBCEUs.

The study was sponsored by MASP, which has long been involved in the planning and development of professional growth opportunities for members through conferences and workshops. Recently, in 1995 and 1996, MASP also offered the opportunity to earn college credit through attendance at the annual statewide fall conference. To assist the organizational leadership in the planning and development of continuing education opportunities to help school psychologists satisfy the new requirement, respondents were asked their preference of a sponsor. Choices included a local or intermediate school district, college or university, or professional organization such as MASP. Slightly less than half of the respondents who expressed an interest in obtaining college credit to satisfy all or a portion of the new requirement indicated a likelihood of attending an MASP-sponsored activity for college credit. Although analysis of the variables of gender and work setting yielded statistically significant relationships, they were quite low. Females were slightly more likely than males to attend an MASP-sponsored activity offered for credit. As almost all of the respondents reported working in a public school, any effect of other work settings on the level of interest was too small to measure.

The preference of MASP as a sponsor for SBCEUs was not as strong as the preference for sponsorship of continuing education programs offered for college credit. Approximately one-fourth of the respondents indicated a preference for attendance at organization-sponsored programs. A locally sponsored program offered for SBCEUs was preferred by almost half of the respondents to the survey. Although statistically significant relationships were found between the variables of

gender, years of experience, and location of employment and the preference of a local sponsor for SBCEUs, the relationship again was quite low. Females were more likely than males to prefer to obtain SBCEUs locally as first choice.

The likelihood of choosing a local sponsor increased with the number of years of experience. As persons mature in their professional practice, it is understandable that other factors, such as personal or family concerns, may also play a part in the desire to have continuing education activities that are more convenient to attend. As the literature has suggested, as more and more women are entering the field (Fagan & Wise, 1994; Reschly & Wilson, 1995), the need to balance career and family responsibilities is a well-recognized concern and may affect a need for convenience.

Half of the respondents choosing a local sponsor as their first choice worked in a suburban location. This would suggest that more Michigan local and intermediate school districts need to plan and develop continuing education opportunities for school psychologists, along with those offered for teachers, counselors, and administrators. MASP could also offer more local activities using the regional structure of the organization and working with the local or intermediate school districts in a region. Planning locally sponsored continuing education programs creates the opportunity to develop them to meet local or regional needs and interests.

A preferred context for obtaining either credit or SBCEUs was also investigated to give further direction for planning and development. For those who

displayed an interest in college credit, a large percentage indicated an interest in a series of short courses developed around a central theme. And slightly more than half of this group indicated an interest in courses offered via television.

This finding offers additional direction for planning and development of continuing education programs. Using the concept of specialization coupled with the broad competencies required by state regulation, continuing education activities could be offered as a specialized series to develop a specific competency. Participation in a continuing education activity that is offered as a series around a central topic may have more educational value than attendance at the typical workshop or program with a topic that is reflective of the latest fad in the field. ADHD is one topic that comes to mind.

A series of short courses also could be developed around the interest in furthering or enhancing a specialty in serving either a particular school age population or specific disability area. Completion of a specialty series could be recognized with a certificate similar to the approach used by Western Michigan University's Specialty in Prevention of Alcohol and Drug Abuse (SPADA) program for clinicians. Certification is awarded upon completion of a series of short courses centering on prevention of and intervention in drug and alcohol abuse, as well as a competency evaluation. This postgraduate specialty certificate is recognized by both the clinical community and the insurance industry.

The development of a postgraduate specialty may allow school psychologists to bring more competence to their day-to-day practice within the context of the

school. It is logical to consider that the development of additional competencies adds value to an employee's service to his or her school district. This may offer additional weight to the argument against school districts subcontracting for services with professionals who do not have expertise in providing school-based psychological services.

Persons who might have developed specialties might also be able to share their expertise by training others. Or they may provide specialized consultation or second opinions in situations where there may be only a small school psychology staff or where the incidence or prevalence of a problem or disability is quite low or infrequent. The need for accurate and early diagnosis of autism, as proposed by Brewster (1997) and Stavrou and French (1992), is one area that comes to mind. The level of interest in furthering or developing a specialty in this disability area was highly ranked on the survey.

The survey indicated a high level of interest in the media approach as a context in which to earn college credit to satisfy the continuing education requirement. The use of a television media approach opens more possibilities for planning and development of continuing education programs. Many school districts, as well as colleges and universities, are equipped for courses using an interactive television context. The MDE will accept continuing education credit or SBCEUs earned through an approved program in a telecommunications or distance-learning context.

The context for those choosing SBCEUs for all or a portion of the means to satisfy the new continuing education requirement was conceived as time: How often should programs be offered, how long should they last, and what time of day is preferred? Respondents clearly indicated that they preferred a monthly program offered in a daytime session. This preference might reflect the need for some continuity and depth to programs offered for SBCEUs.

The availability of release time from the employer to attend continuing education activities and eligibility for reimbursement from the employer were also investigated. The availability of these factors could be considered an indication of support on the part of an employer to maintain a high level of professional growth for school psychologist employees. Most of the respondents indicated that they had some release time from their employers to attend conferences or workshops. While the amount of time reported ranged from one day to six days, the fact that it is available is encouraging. School districts, for the most part, recognize the importance of participation in professional growth activities.

Most of the respondents reported that they did not have reimbursement from their employers for college tuition. The availability of this benefit was not significantly related to the five research variables. Reimbursement for college tuition is likely a contractual benefit. Not all school psychologists might have contracts from their school districts with this benefit.

Reimbursement, either full or partial, for conferences or conventions was reported by more than 70% of the survey respondents. This would suggest strong

support for the professional growth of school psychologists from their employers. Statistically significant relationships were found for both gender and location of employment and the availability of reimbursement for conferences or conventions, but no differences were found for amount. Males and females were about equal in reporting access to some reimbursement for this type of continuing education activity. However, of those respondents reporting no reimbursement, two-thirds were females. Persons who indicated access to conference or convention reimbursement were most likely to work in a suburban or rural location. More than half of the persons who indicated they did not have this type of reimbursement worked in an urban location.

As an additional piece of information for planning and development purposes, respondents were asked how close (in miles) they were to sponsors of continuing education opportunities and how far they were willing to travel to obtain them. Although most of the respondents preferred a local sponsor, this might not always be possible. In this case, distance and a willingness to travel become important considerations in the planning of a continuing education program. More than 60% of the respondents indicated that they were within 25 miles of an approved site for college credit. Most of the respondents indicated that they would be willing to travel up to 50 miles to obtain credit. The variable of years of experience had a statistically significant relationship to the willingness to travel for college credit. Persons with 1 to 5 years and 6 to 10 years of experience were less willing than others to drive any distance for credit. It is possible that these practitioners, who were in the early

stages of career development, may have needed continuing education opportunities that were more conveniently located. Travel takes time. Perhaps the use of a local sponsor or of media technology could reduce the time needed to travel for continuing education credit. Persons with more experience were more willing to travel to obtain credit. It is possible that as individuals mature in their careers, they may be less affected by a need for convenience.

Seventy percent of the respondents reported a distance of 25 miles or less to a site offering SBCEUs. This suggests that there is reasonably convenient local access for many practitioners to earn SBCEUs to fulfill their continuing education requirement. The distance they were willing to travel was evenly distributed across the several distance choices. This may suggest that if a SBCEU program is of sufficient interest to school psychologists, travel distance is not necessarily a prohibitive factor.

Persons working in urban or suburban locations were willing to travel 25 miles or less, whereas those working in small towns or rural areas were willing to travel greater distances. This finding is likely due to the notion that persons working in these areas are more accustomed to driving longer distances for many things, including those outside of work-related activities.

Recent literature in the field (Bradley-Johnson, Johnson, & Jacob-Timm, 1993; Fagan & Wise, 1994; Gutkin & Curtis, 1990; Reschly & Wilson, 1995; Zins & Ponti, 1990) continues to expand a discussion on the idea of a specialty as a means of role expansion in the delivery of school psychological services. Fagan and Wise

(1994) indicated that, although this issue has been discussed frequently in the literature, "little has been published on the subject" (p. 187).

The concept of specialization could be used to guide the development of continuing education programs to this purpose. Two of the major research questions of the study were posed to provide information to help clarify this point. Respondents were asked to indicate interest levels by school age or disability category. Approximately two-thirds of the respondents were interested in a specialty defined by school age levels, and slightly more than half were interested in a disability-area specialty.

The school age levels that received the greatest show of interest were preschool and elementary years. Cross-tabulations of the choice of a school age category by gender yielded an interesting pattern. Females were more interested in an infancy or preschool specialization than were males. This may reflect the expected nurturing and caretaking roles of females in society. Males and females were fairly even in their choices of the other school age categories as possible areas of specialization.

Cross-tabulations of years of experience with the choice of school age category indicated that individuals in the 11- to 15-year range of experience were most strongly represented in the choice of a specialty across all age categories. This suggests that a sizable amount of professional experience may be a factor in the interest in specialization by school age categories.

In contrast to the recent call in the literature for school psychologists to become more involved with general education programs (Fagan & Wise, 1994; Shinn & McConnell, 1994), school psychologists continued to indicate a high degree of interest in special education and working with students with disabilities. This was revealed by the high level of interest in a specialty concerned with a disability category. Yet the specific topic of inclusion models to service disabled students received only a moderate level of interest from respondents.

The special education category receiving the highest percentage of interest was learning disabilities, followed by emotionally impaired, autism, and preprimary impaired. Recent literature has supported the development of skills that provide accurate early diagnosis and appropriate interventions, especially in the area of the autism-spectrum disorders in young children (Brewster, 1997; Stavrou & French, 1992). Using the preprimary impaired category, which is specific to Michigan, as a guide, many continuing education activities have focused on infancy and early childhood needs. It appears that practitioners continue to have strong interest in them as areas of specialized practice activities.

Michigan currently offers special education services from birth through age 26 (R340.1701(d). School psychologists are most often the first persons to recognize and diagnose disorders in the infant and preschool populations. The development of a specialty in these disabilities may provide greater opportunity for appropriate early intervention and educational programming for the very young child with a disability. This reflects closely the thoughts of Short et al. (1990), who

suggested that practitioners will need additional training specific to young children as the implementation of PL 99-457, requiring early childhood special education, continues to develop. The law requires that services provided to disabled children and their families be given by the highest qualified provider. A postgraduate specialty would meet this legal requirement. Currently, many Ph.D. students at Michigan State University are taking the infancy cognate, which leads to a certificate in early childhood education.

Cross-tabulations among the demographic variables indicated that females were slightly more interested than males in a special education categorical specialty. Perhaps this is again reflective of the nurturing or caretaking role accepted by many women.

Persons holding a master's degree were stronger in their preference for the development of a special education categorical specialty than those holding an educational specialist or a doctorate degree. The number of master's-level school psychologists in Michigan is expected to decline, in light of the new requirement for the educational specialist degree as an entry-level credential and as these persons retire. The original data base obtained from the state of Michigan listed approximately one-third of the school psychologists who are currently practicing and are affected by the new credentialing process at this educational level. This compared closely with the percentage of master's-degree respondents to the survey. It might be useful for those who plan and develop continuing education activities to

direct their efforts at this group, using the opportunity to develop a special education specialty as an incentive for participation.

The length of time spent in practice as a school psychologist had a statistically significant relationship to the preference for a special education categorical specialty. Two-thirds of those with 1 to 5 years and 6 to 10 years of experience indicated a preference in this area. About half of the group with 11 to 15 years of experience also were interested in a disability specialty. As school psychologists continue to spend most of their time working with disabled students, it seems logical that, over time, a personal professional interest could develop in a disability area. For planning and development purposes, the offering of continuing education programs covering the various disability areas while emphasizing the most preferred categories seems logical. As research in all branches of science continues to expand our knowledge of disabilities, practitioners need to keep abreast of the findings to better serve the needs of children and their families.

Continuing education provides an opportunity to improve or expand professional competencies (Dubin, 1972; Fagan & Wise, 1994; Houle, 1980; Hynd & Schakel, 1981; Lesiak et al., 1975; Rosenfield, 1981). To provide further guidance for planning and development, the researcher looked at the level of interest in continuing education topics related to the general categories of professional competencies required in state regulations that define the role of the school psychologist in Michigan. These competencies are assessment, consultation, counseling, curriculum, intervention, and prevention. Whereas this study revealed

a high level of interest in intervention, prevention, and consultation as topics, it also showed a continued high level of interest in assessment. Counseling received a moderate amount of interest, whereas curriculum was the least favored topic.

The high level of interest in the topics of intervention, prevention, and consultation reflects closely the current direction of the literature, which has been encouraging school psychologists to become more involved in these activities as a means of role expansion (Cheramie & Sutter, 1992; Herrera & Carey, 1993; Offord, 1996; Poland, 1994; Romualdi & Sandoval, 1995). As Rosenfield (1987) suggested, school psychologists require increased knowledge of effective and appropriate intervention strategies and improved skills in the process of consultation to become skilled "interventionists" rather than merely assessors. Within the top-10 ranking of specific interest items on the questionnaire, half of the preferred topics related to consultation, intervention, or prevention activities. These topics would lend themselves to continuing education programs of both types, college credit and SBCEUs. They also would lend themselves well to the development of a short course series to further or enhance skills in any given area.

Of the demographic variables studied, gender had a statistically significant relationship to the level of interest in all three of these broad service areas. This seems to reflect a pattern observed through the study and may warrant further investigation.

The level of education yielded significant effects in regard to the intervention and prevention categories. Fagan and Wise (1994) and others have indicated that,

whereas school psychologists spend about half of their time performing assessments, they desire to spend less time in this function and more time in virtually every other activity that defines the role (Fagan & Wise, 1994; Huebner, 1992; Miller et al., 1981). Yet the results of this study of school psychologists in Michigan, while supporting interest in performing other types of activities, showed that a high level of interest in assessment remains.

As there continues to be a high level of interest in assessment, planners and developers of continuing education activities might offer opportunities to expand this competency area, as suggested in the literature, by developing programs that promote skills in types of assessment other than intellectual and achievement. The specific topic items on the survey may serve to give further direction for this consideration. From the top-10 most preferred topics found in the study, three items were specific to an expansion of assessment skill: neuropsychological assessment, clinical assessment using the system of the Diagnostic and Statistical Manual of Mental Disorders, and personality assessment. This direction corresponds with the recommendations in recent literature for the development or enhancement of these assessment skills (D'Amato, 1990; Farmer & Peterson, 1995; Hynd, 1992; Kamphaus et al., 1991; Knoff, 1993; Kratochwill & Plunge, 1991; Morris et al., 1991; Riccio et al., 1993).

The average percentage of time respondents reported they spent on counseling activities was 11%, and the reported level of interest in this as an area for continuing education was judged to be moderate compared to those previously

mentioned. Counseling often has been suggested as an area in which school psychologists could provide more direct services to students (Cheramie & Sutter, 1992; Prout et al., 1993). Counseling also has been mentioned in studies of job satisfaction as an activity that is desired as an expansion of service delivery in the schools (Brown, 1994; Prout et al., 1993; Watkins et al., 1991). This makes this finding somewhat curious as counseling has traditionally been accepted as a "psychological" practice. Current Michigan rules provide for school psychological services as a specific service to be included on a student's Individualized Education Plan or Individual Family Service Plan. A recent audit of the second largest school district in the state indicated that this category of service is rarely used (Swanzy, 1996).

There are several possible reasons for the moderate interest level in this broad service area of counseling. Many school psychology programs do not offer opportunity for training in counseling methods. Perhaps this lower level of interest is a case of not missing what is not known. As there is not a high level of expectation to perform this service within a school system, there may not be an opportunity to exercise the skill, even if it was part of preservice training. In addition, there may be role conflict among public school employees such as guidance counselors and school social workers who also provide this service. In some districts these roles are specified by their labor agreements, and providing this service if not so specified in the contract could be construed as a contract violation subject to grievance procedures. Last, depending on the size of the school district

and the size of an individual school psychologist's case load, there may not be much time left during the school day to provide a direct service such as counseling to students.

Curriculum competencies received the lowest level of interest. In Michigan, teaching experience is not required as part of the school psychologist certification process. Although some training programs offer instruction in curriculum and instructional design, many do not. Again, this may be a case of not missing what is not known. The lower level of interest in curriculum compared with the high level of interest in a learning disabilities specialty expressed by respondents to the study seems contradictory. To determine the required severe discrepancy between ability and achievement, which is required by both federal and state rules for the diagnosis of a learning disability, certainly some knowledge of a student's curriculum and how it has been taught is important in the development of an appropriate educational intervention. In addition, this finding seems to be at odds with the call in recent literature (Shapiro & Ager, 1992; Shinn & McConnell, 1994) to link assessment to instruction. Without knowledge of curriculum or instructional design or instructional methods, this may be difficult to accomplish. A lack of knowledge of curriculum, instructional design, or teaching methods may make intervention, prevention, or consultation activities difficult in both regular and special education classrooms. A lack of knowledge in these areas may undermine the credibility of a practitioner with teachers. This low level of interest in curriculum may also account for the lack of strong support for curriculum-based assessment as a tool to evaluate achievement,

which was reported by Fugate (1993). Yet curriculum-based assessment ranked in the top half of preferred topics of specific interest. However, as long as the context of practice remains the school, school psychologists may need to have more encouragement to become more aware of and skilled in this expected competency. Sponsors of continuing education programs may need to do more marketing of the need to enhance or expand this competency area.

The ranking of the top-10 most preferred topics of interest for the development of continuing education programs is likely to be of interest to those who plan and develop these opportunities. However, a look at the lowest ranking topics may have value for planning purposes as well.

The topics receiving the lowest levels of interest included human growth and development, counseling methods, infant assessment, collaboration with social agencies, cultural and ethnic differences, low-incidence assessment, special needs of the gifted, research design and analysis, and bilingual assessment. Perhaps respondents felt comfortable with their level of knowledge in some of these areas--human growth and development, for example. Other topics, such as bilingual assessment or counseling methods, may have only a limited application in everyday practice, depending on many factors, such as location of employment or labor agreements.

The very low level of interest reported regarding the needs of the gifted is indeed puzzling. There has been much information in the research literature and the popular press to suggest that this is an underserved student population in our

schools (Pendavaris & Howlee, 1996; Sapon-Sheva, 1996). This finding seems at odds with the child-advocacy role that characterizes the work of school psychologists. Perhaps the field has focused on the needs of low achievers at the expense of high achievers or those with potential to do so. It certainly bears further investigation.

The low level of interest in the topic of research design and analysis is also puzzling. It may suggest that school psychologists are comfortable with their current level of knowledge or that they do not have a strong desire to engage in educational research. Another possibility may be that there is little support or incentive for research activities among practitioners. Or there simply may not be enough time to devote to this endeavor and keep up with case load requirements. Curiously, school psychologists do use data-based problem solving at the individual level. This is another area warranting further investigation.

A secondary focus of the study was a compilation of demographic characteristics of school psychologists in Michigan and their level of interest in some of the current trends reflected in the literature and compare them to findings from national studies. These comparisons were made in the area of gender ratio of practitioners, degree status, employment location and setting, and how practitioners spend their time in the major service areas of the field.

Many recent national studies (Fagan & Wise, 1994; Pion et al., 1996; Reschly & Wilson, 1995) have presented a picture of a field with a gender ratio of approximately 35% male to 65% female. The findings of this study showed that the

ratio is much smaller, with 43% male to 57% female. Many of the findings throughout this study showed significant but weak effects of gender which are interesting (see Table 34, Appendix D). The differences in preferences expressed by the respondents in this study may stimulate further investigation.

Some recent literature in school psychology has suggested that the field will move to have a larger percentage of practitioners who hold the doctoral degree (Brown, 1989a). In their national study, Reschly and Wilson (1995) did not find evidence to support this trend. Their results indicated that the educational specialist level was the most common degree status. In this study, the educational specialist degree was held by 52% of the respondents. Because this level of education is the standard for certification as a school psychologist in Michigan by state rule, it is expected that the percentage will increase over time. It is possible, however, that if the health care movement increases the strategic role played by the schools, additional Ph.Ds in school psychology and from other areas of psychology (e.g., clinical psychology) may engage in school-linked or school-based psychological services, thereby increasing the number of doctoral-level psychologists in the schools.

The new continuing education requirement could be seen as an incentive for those holding a master's degree or an educational specialist degree to apply the credits to an advanced degree. Twenty percent of the respondents indicated such an interest. The demographic factors of gender, level of education, and years of experience did show statistically significant relationships. Although females were

slightly more likely than males to indicate they would pursue an advanced degree, the degree of relationship for gender was quite low. The level of education had a more negative direction. Approximately two-thirds of those holding a master's or educational specialist degree were not interested in earning an advanced degree. The educational specialist degree was made the entry-level requirement by the state of Michigan in 1989. The new continuing education requirement recognized persons holding a master's degree at the time of implementation of the rule (1992) as fully certificated and did not require the completion of an additional degree.

There may not be a financial incentive for a school psychologist to pursue an advanced degree for several reasons. Most public school employee contracts are typically structured around bachelor's or master's degrees for wages and benefits as these are the degrees most widely held by teachers, counselors, and administrators. In some contracts, the educational specialist degree and the doctoral degree may be specifically recognized for salary purposes. In others, they may be included in a category called master's plus 30 credits, for example. School districts are most often on very tight budgets. In times of a budget shortfall, it is not uncommon for districts to lay off nonteaching personnel, such as counselors, school social workers, and school psychologists. School psychologists and school social workers do not hold tenure under Michigan rules, which makes them somewhat more vulnerable to layoff in times of financial difficulty. Holding credentials above and beyond the required entry level can also prove detrimental in hiring. For example, if an open position for a school psychologist is budgeted by the local or

intermediate school district for a specific dollar amount and that district has a salary schedule that requires additional dollars to be paid for an advanced degree, a candidate with a doctoral degree might be passed over in favor of one with an educational specialist degree as this level of education meets minimal state requirements for hiring. This can be seen by the district as a cost savings in wages both initially, at the time of hire, and paid out over time to an employee.

Professional responsibilities for school psychologists are not differentiated by educational level in Michigan as they are in some states (e.g., Texas). Texas has levels of defined practice, with the doctoral level considered the highest and the one having the most responsibility. In Michigan, the roles and functions of a school psychologist are the same whether a person has a doctorate, an educational specialist, or a master's degree. Much of the work that is currently done by school psychologists, as shown in the recent literature as well as in this study, centers on assessment. A school psychologist who has completed the additional training and developed advanced skills required for a doctoral degree may not have an opportunity to exercise all of them. For these various reasons, it would appear that for school psychology in Michigan, the growth of a doctoral-level profession is not very likely. Of course, if doctoral-level clinical psychologists seek employment in the schools as a private practice and opportunities and financial incentives due to managed care diminish, more school psychologists might seek the doctorate with a clinical or counseling emphasis to ensure their status in the school setting.

In their 1990 national study, Reschly and Connolly found limited support for the existence of a more generalist role for school psychologists employed in rural locations, as well as more involvement in regular education issues. They suggested that continuing education needs of persons employed in different settings, such as a rural location as opposed to urban or suburban, may be different.

The demographic data collected in this study regarding school psychologists who reported working in rural locations revealed that they were, indeed, practicing more as generalists within both school age populations and special education categorical programs as compared to their colleagues in other work locations. However, urban and suburban schools may have case loads distributed in different ways as they are likely to have larger school psychology staffs and a greater variety of educational programs and services.

It was assumed that school psychologists who functioned in a generalist role would not show distinguishable differences in the amount of time spent serving either general or special education programs. Respondents were asked whether they provided service to general education programs. Although 52% of all persons responding answered affirmatively, only 41% of those in rural locations reported this activity. This is also in contrast to those in suburban locations, of whom 65% reported service to general education programs, and 49% of urban and 48% of those from small-town locations indicating this type of service. This finding offers some evidence to the contrary of the results of a national study conducted by Reschly and Connolly (1990), which found support for a rural location of employment and more

involvement in general education issues. It might be questioned that if rural school psychologists are spending less time providing services to general education programs than other employment locations, are they then spending the remainder serving special education programs? If so, this seems to weaken the notion of a more generalist role for rural locations.

Two of the major research questions regarding the level of interest in developing or furthering a specialty by school age or disability category, and the level of interest in continuing education programs centered on the broad service competency areas found in state rules, were analyzed for differences by location of employment. There was no statistically significant relationship between interest in developing a specialty either by school age or disability category and this variable among those working in a rural location. This might be considered to indicate an interest in a more generalized role by default--that is, if not interested in a specialized role. Or it may simply be an indication of satisfaction with the status quo.

The responses of the rural school psychologists in the broad service categories were analyzed on the assumption that a difference in the level of interest might be indicative of a difference in an area needed for enhancement or expansion of a competency. For example, it was assumed that differences in these categories might suggest a movement toward development of a specialty, in consultation or intervention strategies. With respect to the level of interest in the broad competency areas defining school psychological services in this study, no statistically significant

relationships were found between any competency area and location of employment. The level of interest was, therefore, not related to the location of employment.

Some differences for location of employment were noted in the specific interest topics, as summarized in Table 25. However, the specific topics that revealed a statistically significant effect did not represent any particular pattern or broad competency area. Rather, a variety of interests in specific topics was reported. Thus, it would be difficult to determine any particular interest pattern based on the location of employment for these specific topics.

These results do offer some support for the generalist role among rural school psychologists in the provision of service by school age and disability category. However, little support was found to indicate that a rural location of employment was related to more involvement in general education issues or that a rural employment location was significantly related to interest levels suggestive of different continuing education needs in the broad competencies, or to most of the specific interest items.

Respondents in this study were asked to report the percentage of time spent in the major service activities that define the role of school psychologist. Many recent national studies have called for a redefinition of this role, with deemphasis on assessment and expansion of service in all other areas. Yet Fagan and Wise's (1994) extensive review of the literature on this topic revealed that 50% or more of service activity was oriented to assessment, about 25% to intervention, and about 20% to consultation. Fugate (1993), in his study of Michigan school psychologists, reported that school psychologists spent 12% of their time in counseling activities

and 4% of their time in consulting. Results from this more recent study closely resemble those of the national studies in the areas of assessment and consultation, and continue to resemble Fugate's results with respect to counseling activities. Perhaps in the succeeding years since Fugate's study, school psychologists in Michigan have made gains in one area of role expansion, namely, consultation.

In their review of work settings for school psychologists, Fagan and Wise (1994) indicated that although the public school is the predominant work setting, employment in nontraditional areas continues to grow. Reschly and Wilson (1995) found that 86% of the school psychologists in their national study listed their primary work setting as a public school. Results from the present study revealed that 94% of the respondents worked in a public school, 5% in special center schools, and only 1% in any other area. In Michigan, it appears that this trend for employment of school psychologists in nontraditional settings has yet to catch on.

CHAPTER VI

RECOMMENDATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Hynd et al. (1981) suggested that when continuing education is required by law, the requirements create an additional impetus to provide continuing education opportunities. When the new certification and required continuing education rule went into effect in 1992, there was an underlying assumption that this process would ultimately have a positive effect on the practice of school psychology. It seemed reasonable to assume that continuing professional development at an individual level would enhance the delivery system of school psychological services overall and better meet the needs of students in Michigan public schools. However, such requirements are not in themselves a guarantee that these assumptions will be actualized. Some system changes might be required.

System Changes

Michigan Department of Education

If the assumption of an ultimate positive effect on children's education is to be realized from this new procedure, there needs to be coordination of continuing education activities at all levels of the educational system, from the MDE, universities, professional organizations, and local and intermediate school districts.

The MDE is likely to have greater awareness of the larger picture of educational needs within the state. The several departments are also current on state and federal legislation and the implementation of public policies that affect public education. The MDE is likely to have greater awareness of funding, resources, and financial issues that also affect the overall educational delivery system. As the public institution responsible for implementing state rules, it must also ensure accountability for compliance with them. This carries the responsibility for monitoring the quality and the effectiveness of programs and services in the schools.

To ensure the coordination of a higher level of quality continuing education for school psychologists, the MDE might consider the reinstitution of a state supervisor of school psychological services. The MDE had such a position several years ago. Direction and coordination of professional development from the state level has proven to be successful in realizing improvements at the school level. In Iowa, for example, the state director for school psychological services and university trainers worked cooperatively on expanding the use of consultation skills to reduce special education referrals (Reschly & Grimes, 1991).

The MDE Office of Professional Preparation and Certification might also consider clarifying what is meant by the word "approved" in their oversight of postgraduate course work or programs offered for SBCEUs. Postgraduate course work should have a clear relationship to professional practice. Workshops and conferences should have clear relevance to practice as well. Although standards

do exist for the length of time a program offered for SBCEUs must meet to receive MDE approval, standards for content are not apparent in the current policy.

The MDE should expand the list of approved providers of continuing education programs. It is not uncommon for organizations, such as the American Psychological Association or the American Medical Association, to sponsor programs that earn continuing education credit under their auspices. These professional organizations are not likely to apply for "approved" status from the MDE to allow school psychologists who attend to be eligible for SBCEUs. However, these programs are indeed of high quality and relevance to the practice of school psychology. Accepting participation in such programs would go far in expanding the continuing education opportunities for school psychologists.

Universities

The implementation of the new continuing education requirement offers not only an increased opportunity to provide leadership in the development and training of well-educated new school psychologists who enter the field, but also in the area of postgraduate education. The creation and development of postgraduate course work or seminars can assist those in current practice to maintain and enhance their professional skills. The creation of a series of short courses around central themes that have current relevance, or the development of postgraduate specialties, would be in the realm of the training institutions. University professors are most likely to have extensive knowledge of the research base and current trends within the profession of school psychology, as well as the field of education as a whole. Using

this knowledge base in cooperation with the MDE, professional organizations and local school districts could assist in the development of more coordinated, current, and comprehensive continuing education programs. The universities, with their research capabilities, could also provide evaluation services to assist in continual improvement of the process.

Professional Organization

This study was supported by MASP for the purpose of planning and developing programs to assist psychologists in meeting the new state requirement for continuing education. MASP has a long history of sponsoring conferences and workshops. As the professional organization representing about two-thirds of the school psychologists in Michigan, MASP has a strong interest in continuing professional development.

The organization brings many supports to assist the MDE and the universities in developing quality continuing education programs. MASP has access to practicing school psychologists through its membership roster. Through various committees within the organizational structure, MASP closely monitors educational, political, and social issues that affect the profession and the implementation of school psychological services. The regional structure of MASP approximates the regional structure of ISDs in Michigan. MASP provides communication and information on these issues to subscribers through the Michigan Psych Report, the organization's newsletter. It also has marketing capabilities for continuing education programs through the organizational newsletter.

One of the findings of this study was that respondents preferred MASP as a sponsor of activities offered for college credit and preferred a local sponsor such as a local or intermediate school district for obtaining SBCEUs. It is recommended that MASP develop a collaborative relationship with university trainers of school psychologists to offer programs for college credit. This could be accomplished by using the fall or spring statewide conferences sponsored by the organization as a means of offering a short course. The additional cost of tuition, along with registration fees, would need to be considered because many persons indicated that they did not receive reimbursement for college tuition. Conference and convention leave and partial reimbursement were somewhat more available to school psychologists from their employers. Such courses would have to be developed and monitored through one of the state colleges or universities. Or a continuing education consortium could be developed among the Michigan universities that offer school psychology training programs. Enrollment and completion of requirements would then be indicated on a college transcript. This would simplify the record keeping and documentation needed to verify completion of the continuing education requirement at the time of recertification.

Local and Intermediate School Districts

Local and intermediate school districts are in a position to be most clearly aware of the educational needs of their own school populations. The superintendents and special education directors are most likely to be aware of local funding and resources. They are most likely to be aware of some of the individual

professional competencies possessed by their school psychologist employees through regular individual performance reviews.

The new continuing education requirement offers these local agencies an opportunity to have a positive influence on the delivery of school psychological services to meet particular local educational needs. Local and intermediate school districts commonly offer staff development programs. Unfortunately, most of them are designed for teaching or administrative staffs, which represent a majority of the professional employees. Working cooperatively with each other and the MDE, the universities and professional organizations could increase development of continuing opportunities for school psychologists to address local or regional needs and to enhance or expand personal professional competencies.

Local and intermediate school districts might review their policies regarding release time or reimbursement to attend professional development programs to ensure that they are not acting as a barrier to the required professional growth of their school psychologist employees.

In this study it was found that school psychologists preferred a local sponsor for SBCEU programs. They also preferred a monthly, daytime format. This would suggest that MASP, in collaboration with university trainers, should work cooperatively through the regional structure of the organization with local and intermediate school districts to plan and develop programs offering SBCEUs. This type of cooperation could result in the development of programs specifically tailored

to meet regional or local needs and the interests of practitioners. Such programs could also serve as a local or regional forum for school psychologists in the area.

This arrangement may help to share costs among sponsors as well. MASP should continue to act as the registrar at these events, keeping the record of attendance and completion of the SBCEU activity, to remove this burden of providing documentation from the local or intermediate school district. MASP would then supply a transcript to participants to use for verification of SBCEU continuing education activity at the time of renewal of the certificate.

Individual Practitioners

The new continuing education requirement offers each individual school psychologist an opportunity to examine his or her own delivery of services. This new process emphasizes the ethical responsibility to monitor and improve individual skills to achieve a higher level of professional competence. The requirement creates an opportunity to enhance, expand, or develop new skills that could spur role expansion in individual practice. At the individual practitioner level, the greatest potential exists to truly have a positive effect on addressing the educational needs of children within the schools.

To ensure that the new continuing education requirement will have a beneficial effect on meeting the educational and mental health needs of Michigan school children, a great deal of coordination and planning is needed from the leadership at all levels of the system to make it happen. Each level within the educational system has many resources. If these were used in a collaborative

fashion, the continuing education process might become more comprehensive and meaningful for the individual practitioner and a real benefit to the profession of school psychology as a whole.

Context

The concept of a media context was of strong interest to the respondents in this study. The major sponsors of continuing education programs for school psychologists should investigate the use of a media context. Teleconferencing and interactive video courses are becoming more common in education, as well as in business and industry. Linking these newer methods of training to continuing education programs offers a broader spectrum of opportunity in quality of programming. Many respondents preferred to do minimal amounts of travel to obtain SBCEUs. Using this technology may be an answer to both time and travel concerns.

Satellite technology could also be investigated to offer long-distance programs that can be down-linked locally. These programs could then be offered at local sites set up for an interactive format. Programs developed within a media context might also be offered on the education-access stations available through many local cable television companies. Currently, many colleges offer courses via television. Teleconference technology is already being used in education as well as in business and industry for training and professional development. Cooperative efforts, such as the development of a continuing education consortium, among

continuing education sponsors could enhance the quantity and quality of programs offered in this context.

Although preferences regarding the likelihood of attending programs offered as a series around a central topic or via television were not specifically gathered through the survey, this time preference lends itself to developing SBCEU activities offered as a series or via television as well. The opportunity to earn SBCEUs could be combined with programs offered for credit. The program requirements would not necessarily be the same if participating to earn SBCEUs instead of credit or a specialty certificate, for example. This would allow the use of similar resources for the development of a program, and persons could attend in a manner that best met their professional preference.

Topics

The survey yielded a sizable number of broad and specific topics of strong interest that would be useful for planning and developing continuing education programs. By working cooperatively, the leaders in the field from all levels of the educational system could coordinate topics that not only address the current levels of practitioners' interest but could open new horizons as well. Practitioners may not always have the big picture of current and future developments in the field that require increased skill or knowledge.

Sponsors of continuing education activities should continue to offer programs relating to the topics of infancy, early childhood, and preschool education. These areas continue to show a high level of interest among respondents and fit with

federal legislation requiring special education programs and services for very young children and their families.

School psychologists continue to show high levels of interest in the special education categorical areas of learning disabilities, emotional impairments, autism, and early childhood disorders. Sponsors of continuing education programs should continue to offer opportunities that target the needs of students with these as well as all other disabilities that interfere with learning.

Although it has been assumed by some in the field that assessment activities are not of interest to school psychologists, the findings from this study suggest that there continues to be a high level of interest in this major competency area. Planners should consider offering opportunity for continuing education in areas of assessment other than those most typically used by school psychologists. This researcher found that there was a high level of interest in neuropsychological assessment, clinical assessment, and personality assessment. Moderate levels of interest were shown in curriculum-based assessment and preschool assessment.

The topics of consultation, intervention, and prevention strategies were also of high interest. As these are very broad topics, they offer much opportunity for sponsors of continuing education programs to develop a wide variety of programming to meet the needs of practitioners. These areas also lend themselves to the development of short courses or a series of presentations that could serve to enhance or expand these specific competencies.

As the process of school restructuring continues in Michigan, especially as it applies to special education, school psychologists will need to be kept current on the changes in the educational delivery system and their place within it. The movement is toward a more unified educational system with emphasis on noncategorical programming for students with disabilities. There is an expectation of more collaboration with social agencies and the development of student support service teams. This will require school psychologists to be well versed in the areas of curriculum, instructional design, behavior, and classroom management. As curriculum and instructional design were not highly preferred topics of interest, sponsors of continuing education programs will have to do more marketing of the growing need for proficiency in these educational areas.

Future Research

One of the interesting findings from this study was the significant relationship of gender to many of the questions. Although the results were statistically significant for many specific questions throughout the study, they were not very strong in their degree of relationship. However, in many cases, females were responsible for the difference. The literature has suggested a growing national trend toward more females than males in the profession. There is a question as to what influence this demographic factor may have on future trends within the field. A more in-depth study of gender could investigate the concern that increased participation by women may lead to erosion of the status of school psychology in Michigan.

Additional studies might shed light on the reasons for the low level of interest in such important topics as curriculum, special needs of the gifted, and research design and analysis. The relatively low interest on the part of practitioners underscores the point that individual interest should not be the sole or necessarily the primary determinant of continuing education needs. Leaders from all levels in the profession may have to help them expand their horizons, especially if the practice of school psychology is to remain an integral and indispensable service in the schools.

In 1997, all school psychologists must present their documentation of completion of the continuing education requirement. It will be of interest to have a follow-up study to verify the actual options chosen by practitioners to fulfill the new requirement. What people say they will do does not always correlate that well with what they actually do.

Within a climate of school reform, the MDE adopted the new certification and continuing education requirement for school psychologists. An underlying assumption of this new process was that the school psychological services provided to Michigan school children would continue to be delivered by well-trained, competent professionals. Another, more basic assumption is that these services would have a beneficial effect on education within the schools. Once the process of recertification has gone through the first five-year cycle in 1997, the MDE should assess the basic assumption of beneficial effects within the educational delivery system as a consequence of the required continuing education program.

Further research might also address the issue of whether school psychologists actually engaged in their preferences for satisfying the continuing education requirement. They also could be asked for ways to enhance the value of this new requirement.

APPENDICES

APPENDIX A

SURVEY FORM

Michigan Association of School Psychologists Continuing Education Survey

Please answer the following questions.

ABOUT YOU

1. Sex: ____ Male ____ Female

2. Highest degree earned:

____ Masters ____ Educational Specialist ____ Doctorate

3. Years of experience as a school psychologist: _____

ABOUT YOUR PLACE OF EMPLOYMENT

4a. Predominant location:

_____urban (city) _____suburban ____rural ____small town (not rural)

4b. Predominant setting:

_____Public School ____Private School _____Parochial School _____Hospital School _____Special Center School

ABOUT YOUR CASELOAD

5a. Describe your current caseload as to the ages of the students you service. Please check only those that apply.

_____Infants _____Preschool _____Elementary School _____Middle/Junior High School _____High School _____Adults

5b. Describe your current caseload as to the types of Special Education programs you service. Please check only those that apply.

__Autistic Impaired __Hearing Impaired __Severely Mentally Impaired __Emotionally Impaired __Visually Impaired

__Trainable Mentally Impaired __Educable Mentally Impaired __Physically or Otherwise Health Impaired __Severely Multiply Impaired __Learning Disabled

__Speech and Language Impaired __PrePrimary Impaired __Resource Rooms

5c. Do you service any General Education programs?

___ yes ___ no

5d. Would you be interested in developing or furthering a school age specialty in your practice?

___ yes ___ no

If yes, please indicate your choice.

___ Infants ___ Preschool ___ Elementary ___ Middle/Jr High School ___ High School ___ Adults

5e. Would you be interested in developing or furthering a specialty in one of the categorical areas?

___ yes ___ no

If you answered yes, please indicate your choice.

___Autistic Impaired ___Hearing Impaired ___Severely Mentally Impaired ___Emotionally Impaired ___Visually Impaired

___Trainable Mentally Impaired ___Educable Mentally Impaired ___Physically or Otherwise Health Impaired ___Severely Multiply Impaired ___Learning Disabled

___Speech and Language Impaired ___PrePrimary Impaired ___Resource Rooms

6. Please estimate the percentage of time you spend in the following activities. Total should not equal more than 100%.

___Evaluation ___Consultation ___Curriculum ___Prevention ___Intervention ___Counseling

ABOUT YOUR CONTINUING EDUCATION PLANS:

7. Is tuition reimbursement available from your employer?

___ No. ___ Yes. Number of credits per year: _____ (Please convert term hours to semester hours at 3T=2S)

8. Is Conference/Convention Leave time available from your employer?

___ No. ___ Yes. Number of days per year: _____

9. Is reimbursement for Conference/Convention leave available from your employer?

___ No. ___ Yes. Type of reimbursement: _____Full _____Partial _____None

10a. Geographic access to the closest approved site for college credit:

____ 25 miles or less ____ 26-50 miles ____ 51-75 miles ____ 76-100 miles ____ 100+ miles

10b. If a college course were of interest to you how far would you be willing to travel to attend?

____ 25 miles or less ____ 26-50 miles ____ 51-75 miles ____ 76-100 miles ____ 100+ miles

11a. Geographic access to the closest approved program to grant SBCEUs:

____ 25 miles or less ____ 26-50 miles ____ 51-75 miles ____ 76-100 miles ____ 100+ miles

11b. How far would you be willing to travel to attend programs offering SBCEUs?

____ 25 miles or less ____ 26-50 miles ____ 51-75 miles ____ 76-100 miles ____ 100+ miles

12. My choice of format to fulfill my continuing education requirement:

a._____ 6 Semester hours. **If you chose this option, please answer Question 13 and omit 14 and 15.**

b._____ 18 SBCEUs. **If you chose this option, please answer Question 14 and omit 13 and 15.**

c._____ Combination of credit and SBCEUS. **If you chose this option, please answer Question 15 and omit 13 and 14.**

13. **Answer only if you chose 12a.** If you chose the 6-semester option, please answer the following questions.

a. Credit to be applied to an advanced degree? ____Yes ____No

b. I am most likely to obtain my credits at: _____College or University

c. If college credit were available at MASP sponsored programs, would you attend?

____ Definite Yes ____Yes ____ Maybe ____ No _____Definitely No

d. If it were available, how likely would you be to enroll in a series of short courses on related topics which were designed to obtain the required 6 semester hours?

_____ Very likely ___ Likely ____ Maybe ____ No _____Definitely No

e. If it were available, how likely would you be to enroll in a college course via television?

_____ Very likely ___ Likely ____ Maybe ____ No _____Definitely No

14. **Answer only if you chose 12b.** If you chose the 18 SBCEUs option, please answer the following questions.

a. Preferred frequency of CEU programs:

____Weekly ____Monthly ____Semi-annually ____Annually

b. Preferred time span:

____Half-day sessions ____Weekend sessions ____Full-day sessions ____Week-long sessions ____Two-day sessions

c. Preferred time:

____Daytime ____Evenings ____Weekends ____Summer

d. Please rate your choice in order of preference as to how you are most likely to obtain SBCEU's: 1 (first choice), 2 (second choice), 3 (third choice)

____ locally (own school district, ISD, neighboring district)

____ Institutionally (college, university, teaching hospital)

____ Organizational (professional conferences, workshops)

15. **Answer only if you chose 12c.** If you chose a combination of SBCEUs and semester credit, please answer the following questions.

a. Probable number of college credits: ____

b. Credit to be applied to an advanced degree? ____Yes ____No

c. I am most likely to obtain my credits at: _____College or University

d. If college credit were available at MASP sponsored programs, would you attend?

____Definite Yes ____Yes ____Maybe ____No ____Definite No

e. If it were available, how likely would you be to enroll in a series of short courses on related topics which were designed to obtain the required 6 semester hours?

____Very likely ____Likely ____Maybe ____No ____Definitely No

f. Probable number of SBCEUs: _____

g. If it were available, how likely would you be to enroll in college course via television?

____Very likely ____Likely ____Maybe ____No ____Definitely No

h. Preferred frequency of CEU programs:

____Weekly ____Monthly ____Semi-annually ____Annually

i. Preferred time span:

____Half-day sessions ____Weekend sessions ____Full-day sessions ____Week-long sessions ____Two-day sessions

j. Preferred time:

____Daytime ____Evenings ____Weekends ____Summer

k. Please rate your choice in order of preference as to how you are most likely to obtain SBCEU's: 1 (first choice), 2 (second choice 3 (third choice)

____locally (own school district, ISD, neighboring district)

____Institutionally (college, university, teaching hospital)

____Organizational (professional conferences, workshops)

16. The State of Michigan rules for the role and functions of a School Psychologist define these broad skill areas. Please indicate your lev of interest in Continuing Education Programs on these major topics. Please circle your answer.

	1-Very Interested	2-Interested	3-Maybe	4-Not Interested	5-Definitely Not Interested
a. Assessment	1	2	3	4	5
b. Consultation	1	2	3	4	5
c. Counseling	1	2	3	4	5
d. Curriculum	1	2	3	4	5
e. Intervention	1	2	3	4	5
f. Prevention	1	2	3	4	5

17. Please indicate your level of interest in the following specific topics for Continuing Education Programs. Please circle your answer.

	1-Very Interested	2-Interested	3-Maybe	4-Not Interested	5-Definitely Not Interested
Consultation skills and methods	1	2	3	4	5
Pre-referral consultation	1	2	3	4	5
Developing peer intervention program	1	2	3	4	5
Consultation with families	1	2	3	4	5
Consultation with mental health agencies	1	2	3	4	5
Consultation with physicians and other health care providers	1	2	3	4	5
Counseling methods for pre-school aged children	1	2	3	4	5
Cognitive Behavior Therapy groups	1	2	3	4	5
Group counseling methods	1	2	3	4	5
Collaboration with social agencies	1	2	3	4	5
Bi-lingual assessment	1	2	3	4	5
Neuro-psychological assessment	1	2	3	4	5
Curriculum-based assessment	1	2	3	4	5
Personality assessment	1	2	3	4	5
Clinical assessment using DSMIII-R	1	2	3	4	5
Authentic assessment	1	2	3	4	5
Pediatric Psychopharmacology	1	2	3	4	5

	1-Very Interested	2-Interested	3-Maybe	4-Not Interested	5-Definitely Not Interested
Preschool assessment	1	2	3	4	5
Infant assessment	1	2	3	4	5
Low incidence assessment	1	2	3	4	5
Curriculum planning and teaching strategies	1	2	3	4	5
Outcome based education	1	2	3	4	5
Human Growth and Development	1	2	3	4	5
Behavioral and classroom management techniques	1	2	3	4	5
Cultural and ethnic differences	1	2	3	4	5
Computer skills	1	2	3	4	5
Program evaluation methods	1	2	3	4	5
Research design and analysis	1	2	3	4	5
Inclusion models	1	2	3	4	5
School restructuring	1	2	3	4	5
Parenting education	1	2	3	4	5
Student Assistance Programs	1	2	3	4	5
Special needs of the Gifted	1	2	3	4	5
Alternative service models	1	2	3	4	5

Thank you very much for your cooperation. Please return your completed survey to

Mary Lou Ross, President
Michigan Association of School Psychologists
7546 Candlewood SE
Grand Rapids, Michigan 49546

APPENDIX B

COVER LETTER

MICHIGAN ASSOCIATION OF SCHOOL PSYCHOLOGISTS
Affiliated with National Association of School Psychologists
MASP

August 15, 1994

Dear School Psychologist,

In 1992 you were granted a Michigan School Psychologist certificate from the State Board of Education. This certificate is now a legal condition of employment in the schools of our state. A program of continuing education is needed to renew the certificate. Renewal, which occurs for most school psychologists in 1997, requires the completion of 6 semester hours of college credit from a State Board approved institution or the equivalent in State Board approved Continuing Education Units within that time period.

As part of its long standing commitment to professional development, the Michigan Association of School Psychologists is sponsoring a survey of randomly selected individuals from the group of the newly certified School Psychologists in our state. The purpose of this project is to learn how our colleagues plan to satisfy this requirement and which topics are of greatest interest for continuing education. The information gathered will be used by the organization as a part of long range planning to continue to provide quality professional development programs. The results also will be shared with the university training programs in Michigan to help in their planning as well.

The survey will take 10-15 minutes to complete. Your responses are confidential. Additional specific information regarding the definitions in the law may be found on the reverse side of this letter. **Please return your completed survey in the enclosed envelope by August 31, 1994.**

As an added incentive for your participation, MASP will hold a drawing for a free membership to begin in the 1994-1995 fiscal year. After you have completed and mailed the survey, fill out and send the enclosed post card to be used in the drawing which will be held on September 14, 1994. The winner will be notified by mail.

The current trends of change in education will undoubtedly have an impact on our role as school psychologists and on our present service delivery systems as well. I hope you will make participation in the survey a personal and professional priority. This is an opportunity to share your thoughts, which collectively, can add up to make a difference for our profession in meeting the challenge of change through continuing education.

Sincerely yours,
Mary Lou Ross
MASP Past-President

APPENDIX C

STATE OF MICHIGAN RULES REGARDING ROLE AND COMPETENCY AND CERTIFICATION OF SCHOOL PSYCHOLOGISTS

Some additional information and definitions:

SCHOOL PSYCHOLOGIST CERTIFICATION

R 380.206 pertaining to the school psychologist certificate states that "a school psychologist certificate shall be valid for 5 years..." and that "the renewal of a school psychologist certificate requires the completion of 6 semester hours of credit in an approved program or the equivalent in approved state board continuing education units."

1. The 6 semester hours for renewal may be completed a at a State Board approved program in a college or university which has regional, state, or national accreditation and which prepares school psychologists in accordance with these rules.
2. Continuing Education Units means credit received for successfully completing a board approved professional development program. One continuing education unit equals 10 contact hours of participation in a class, workshop, seminar, conference or clinic activity. One semester credit equals 30 contact hours.
3. A combination of credit hours and SBCEUs may be used to satisfy the requirement. When based on a combination of SBCEUs and semester credit hours, count 1 semester credit = 3 SBCEUs.
4. All renewal credits must contribute to the individual's professional development as a school psychologist.

REVISED ADMINISTRATIVE RULES
for
Special Education

Effective
July 1, 1987

Including

Rules for
School Social Worker
and
School Psychological Services

and

Rules for the Transportation of
Handicapped Persons

Michigan State Board of Education
Box 30008
Lansing, Michigan 48909

DEPARTMENT OF EDUCATION

STATE BOARD OF EDUCATION

SCHOOL PSYCHOLOGIST CERTIFICATE

Filed with the Secretary of State on
These rules take effect on September 1, 1992

(By authority conferred on the state board of education by section 1251 of Act No. 451 of the Public Acts of 1976, as amended, being §380.1251 of the Michigan Compiled Laws)

R 340.1151 – R 340.1158 Rescinded by R 380.210.

R 380.201 Definitions.

Rule 1. As used in these rules:

(a) "Approved program" means a board-approved program in a college or university which has regional, state, or national accreditation and which prepares school psychologists in accordance with these rules.

(b) "Board" means the state board of education.

(c) "Continuing education unit" means credit received for successfully completing a board-approved professional development program. One continuing education unit equals 10 contact hours of participation in a class, workshop, seminar, conference, or clinic activity. One semester of credit equals 30 contact hours. A program sponsor shall maintain all records of a school psychologist's participation.

(d) "Department" means the department of education.

(e) "Michigan institution" means an institution of higher education which has regional, state, or national accreditation.

(f) "Preliminary school psychologist certificate" means the initial certificate issued to an applicant who has met the requirements of R 380.204 to function as a school psychologist.

(g) "School psychologist certificate" means a certificate that is issued to an applicant who has met the requirements of R 380.206 and R 380.208.

R 380.202 Persons to hold school psychologist certificate.

Rule 2. (1) A school psychologist, effective September 1, 1992, shall hold a certificate pursuant to these rules. Only a person who is certificated by the

department as a school psychologist in accordance with these rules shall use the title of school psychologist.

(2) A person who is employed as a school psychologist by a local or intermediate school district shall be required, by September 1, 1992, to hold a valid Michigan school psychologist certificate or a preliminary school psychologist certificate.

R 380.203 Role of school psychologist.

Rule 3. A school psychologist may function in the following roles:

(a) Provide school psychological services to any pupil.

(b) Collaborate with staff in planning educational intervention, curriculum, behavioral management, and teaching strategies.

(c) Consult, counsel, and collaborate with pupils, parents, school personnel, and appropriate outside personnel regarding mental health, behavioral, and educational concerns utilizing psychological principles.

(d) Provide psychological evaluation for pupils referred as candidates for special education programs and provide reports to the appropriate educational authority.

(e) Perform systematic direct observations of pupils.

(f) Administer tests which may include intelligence, achievement, personality, adaptive behavior, and perceptual-motor tests.

(g) Interpret the psychological and other diagnostic data for professionals, parents, pupils, and appropriate others.

(h) Collaborate in program planning and evaluation services for decision-making purposes.

R 380.204 Preliminary school psychologist certificate.

Rule 4. (1) An applicant for a preliminary school psychologist certificate shall meet both of the following requirements:

(a) Have completed a minimum of 45 graduate semester hours in an approved program toward the school psychologist certificate. An internship shall not be considered a part of the 45 semester hours.

(b) Have completed not less than a 600-clock-hour, supervised internship with school-age pupils in an approved school psychologist program, 300 clock hours of which shall be in a school setting under the supervision of a person who holds a Michigan school psychologist certificate.

(2) Officials of a Michigan institution that has an approved program shall recommend to the department, on a form provided by the department, the issuance of a

preliminary school psychologist certificate. The recommendation to issue the preliminary school psychologist certificate shall be made when an applicant has completed the requirements approved by the board as defined in these rules. An application to an institution with an approved program for a preliminary school psychologist certificate shall be considered a certification requirement. An applicant shall meet the requirements for a preliminary school psychologist certificate when his or her application has been received and approved by the institution and the department. The department shall review the recommendation made by the officials of an institution before the certificate is issued to determine that certification requirements are met.

(3) A preliminary school psychologist certificate shall be valid for 3 years. A preliminary school psychologist certificate expires on June 30 of the expiration year indicated on the certificate.

(4) A person employed under the preliminary school psychologist certificate must have local supervision provided by a fully certificated school psychologist.

(5) An applicant and an employer shall be familiar with the specific requirements of the preliminary school psychologist certificate.

(6) A preliminary school psychologist certificate may be renewed for an additional 3 years upon completion of not less than 6 semester hours of credit in an approved program. Credit shall be in courses appropriate to a school psychologist as determined by the institution. A preliminary school psychologist certificate may be renewed once.

R 380.205 Out-of-state credit for preliminary school psychologist certificate.

Rule 5. (1) An out-of-state applicant for a school psychologist certificate shall apply for a Michigan preliminary school psychologist certificate.

(2) The board may accept a comparable school psychologist certificate from another state or a foreign country as a basis for the issuance of a Michigan preliminary school psychologist certificate.

(3) The board may accept credits presented for certification from accredited institutions or agencies located in other states or foreign countries. Proof of credit shall be submitted to the department directly from the institution, on official transcripts.

R 380.206 School psychologist certificate.

Rule 6. (1) An applicant for a school psychologist certificate shall meet all of the following requirements:

(a) Hold a valid Michigan preliminary school psychologist certificate.

(b) Possess a specialist's degree or its equivalent in school psychology from an institution with an approved program.

(c) Have completed a minimum of 15 graduate semester hours in school psychology, including an internship, in addition to the 45 semester hours required for the preliminary certificate.

(d) In addition to the 600 clock hours required for the preliminary certificate, have completed not less than a 600-clock-hour, supervised internship with school-age pupils in an approved school psychologist program, 300 clock hours of which shall be in a school setting under the supervision of a person who holds a Michigan school psychologist certificate.

(e) Meet the requirements set forth in this rule and in R 380.208.

(f) Have completed 1 year of successful experience employed as a school psychologist with direction from a fully certificated school psychologist.

(2) Officials of a Michigan institution that has an approved school psychologist program shall recommend, to the department, on a form provided by the department, the issuance of a school psychologist certificate. The recommendation to issue a school psychologist certificate shall be made when an applicant has completed the requirements of these rules. An application to an institution that has an approved program for a school psychologist certificate shall be considered a certification requirement. An applicant shall meet the requirements for a school psychologist certificate when his or her application has been received and approved by the institution and the department. The department shall review the recommendation made by the officials of an institution before the certificate is issued to determine that certification requirements are met.

(3) A school psychologist certificate shall be valid for 5 years.

(4) A school psychologist certificate expires on June 30 of the expiration year indicated on the certificate.

(5) An applicant and an employer shall be familiar with the specific requirements of the school psychologist certificate.

(6) The renewal of a school psychologist certificate requires the completion of 6 semester hours of credit in an approved program or the equivalent in approved state board continuing education units. Credit shall be towards

an individual's professional development as a school psychologist. Credit completed out of state shall be earned at an accredited institution.

(7) All renewal credit shall be completed after the date of issuance of a school psychologist certificate and within the 5-calendar-year period before applying for renewal.

(8) Correspondence credit is not acceptable for meeting the requirements of an initial school psychologist certificate or its renewal.

(9) Credit earned toward renewing a school psychologist certificate may be used for renewing a teaching or administrator's certificate.

(10) To renew a school psychologist certificate that has been expired for more than 5 years, 12 semester hours of credit shall be required.

(11) To renew a school psychologist certificate that has been expired for more than 10 years, 18 semester hours of credit shall be required.

R 380.207 Program approval and periodic review.

Rule 7. (1) A school psychologist preparation program shall be approved for a 5-year period by the board. The requirements for the school psychologist certificates identified in these rules shall be included as part of the program preparation. The board shall review the adequacy of institutional resources, staff, and academic advisement services in meeting state requirements. The board will also utilize supply and demand data in determining the need for approving additional training programs.

(2) A 5-year renewal of board approval shall require an institutional report of graduates before program renewal and a report of the number of instances certificate recommendations have been denied. The report shall include recommendations for program revisions and responses from graduates, employers, and other school administrators on revising program requirements.

(3) Failing to comply with board certification and program approval requirements or knowingly advising individuals to complete credit in excess of board-approved institutional requirements may result in the suspension of an institution's approval pending a review by the state superintendent of public instruction.

(4) The officials of an institution shall document to the department that the applicant has met all approved program requirements.

R 380.208 School psychologist competencies.

Rule 8. A candidate seeking approval for a school psychologist certificate shall be recommended by an approved college or university as having demonstrated all of the following competencies:

(a) A knowledge of the organization and administration of local and state agencies and their services for pupils.

(b) A knowledge of federal and state special education laws and other legal aspects of the role of the school psychologist.

(c) Skills in the ability to consult, counsel, and collaborate with pupils, parents, school personnel, and appropriate outside personnel regarding mental health, behavior, and educational concerns utilizing psychologist principles.

(d) An understanding of the rationale of testing, measurement, and skills in the administration of tests, including those which measure intelligence, achievement, personality, adaptive behavior, and perceptual-motor skills.

(e) The ability to carry out systematic direct observations of pupils.

(f) Skills in integrating data obtained from tests and from other sources of information and the ability to communicate these findings to other professionals, parents, and pupils in a meaningful way.

(g) Skills in psychological report writing and other written communication.

(h) The acquisition and mastery of a broad understanding of learning and learning impairments.

(i) A knowledge of human growth and development in pupils with or without handicaps.

(j) A knowledge of human behavior and behavior management techniques and the capacity to plan and implement classroom management procedures pertaining to the behavior of pupils.

(k) A comprehensive understanding of personality development and the assessment of human behavior.

(l) A knowledge of how cultural and ethnic differences influence behavior and affect evaluation.

(m) Competency in the planning and prescribing of teaching and curriculum strategies for pupils.

(n) A knowledge of computer technology necessary to implement computer applications for management, to understand the computer's instructional value, and to develop the computer skills needed in the delivery of special education services.

(o) A knowledge of the ethical standards of the profession of school psychology.

R 380.209 Eligibility of persons who have temporary or full approval on August 31, 1992, to receive certificates.

Rule 9. (1) A person who has temporary approval as a school psychologist on August 31, 1992, pursuant to the provisions of R 340.1153 shall be eligible to receive the preliminary school psychologist certificate without meeting the certificate requirements set forth in the provisions of R 380.204.

(2) A person who has full approval as a school psychologist on August 31, 1992, pursuant to the provisions of R 340.1152 shall be eligible to receive the school psychologist certificate without meeting the requirements set forth in the provisions of R 380.206.

(3) A school psychologist who was approved on August 31, 1992, pursuant to the provisions of R 340.1152 or R 340.1153 shall have 5 years from the effective date of these rules to apply for a preliminary school psychologist or school psychologist certificate.

R 380.210 Rescission.

Rule 10. R 340.1151 to R 340.1158 of the Michigan Administrative Code, appearing on pages 2795 to 2797 of the 1979 Michigan Administrative Code, are rescinded.

DEPARTMENT OF EDUCATION
STATE BOARD OF EDUCATION
SCHOOL PSYCHOLOGICAL SERVICES

(By authority conferred on the state board of education by section 620a of Act No. 269 of the Public Acts of 1955, as added, being §340.620a of the Michigan Compiled Laws)

R 340.1151 Role of school psychologist.

Rule 1. Among other functions a school psychologist may:

(a) Be involved in planning educational intervention, curriculum, management, and teaching strategies for pupils.

(b) Consult and counsel pupils, administrators, school personnel, parents, and others.

(c) Be available for evaluation of all pupils.

(d) Evaluate pupils referred as potential candidates for special education programs and present a report to the local educational authority on pupils he has evaluated.

(e) Administer tests which may include intelligence, achievement, personality, and perceptual-motor tests.

(f) Interpret the psychological and other diagnostic data to professionals, parents, pupils, and others.

R 340.1152 Qualifications of school psychologist.

Rule 2.(1) For full approval by the department of education, a school psychologist shall meet all of the following requirements:

(a) Possess at least a master's degree in school psychology or its equivalent.

(b) Have completed a minimum of 45 graduate semester hours in school psychology or related areas, in addition to an internship.

(c) Have completed not less than a 500 clock hour supervised internship with school age persons under the supervision of an approved school psychologist training institution.

(d) Meet the competency requirements as set forth in R 340.1156.

(e) Have completed 1 year of successful experience as a school psychologist with direction from a fully approved school psychologist.

(2) An institution of higher education maintaining a school psychologist training program approved by the department shall make a recommendation concerning the full approval of a school psychologist.

(3) A school psychologist shall request reapproval from the department if he were previously fully approved but has not been employed as a school psychologist for 5 or more consecutive years.

R 340.1153 Temporary approval.

Rule 3.(1) For temporary approval by the department of education, a school psychologist shall meet all of the following requirements:

(a) Have completed a minimum of 30 graduate semester hours toward competencies for full approval in school psychology or related areas, in addition to the internship.

(b) Have completed not less than a 500 clock hour supervised internship with school age pupils under the supervision of an approved school psychologist training institution.

(2) An institution of higher education maintaining a school psychologist training program approved by the department shall make a recommendation concerning the temporary approval of a school psychologist.

(3) Temporary approval may be extended annually for 3 consecutive years if a school psychologist completes a minimum of 6 semester hours of satisfactory work necessary for full approval prior to September 1 of each year.

R 340.1154 Approval of school psychologists trained out of state.

Rule 4. Temporary approval may be granted for 1 year to a school psychologist fully approved or certified as a school psychologist by another state, if Michigan has a reciprocal agreement with that state. Full approval shall be given upon completion of a successful year as a school psychologist in Michigan. If reciprocity has not been established, the department of education shall evaluate his credentials and experience to determine eligibility for approval.

R 340.1155 Approval of training program.

Rule 5. A school psychologist training program maintained by an institution of higher education in this state shall be approved by the department of education. An approved program shall be in compliance with the competency requirements for a school psychologist under R 340.1156.

R 340.1156 School psychologist competency requirements.

Rule 6. A person completing a school psychology training program shall demonstrate competencies as follows:

(a) A knowledge of the organization and administration of local and state agencies and their services for pupils.

(b) Skills in the administration and interpretation of tests, which shall include intelligence, achievement, personality, and perceptual-motor tests.

(c) An understanding of the rationale of testing, measurement, and evaluation.

(d) Skills in integrating data obtained from tests and from other sources of information through both written and oral communication.

(e) Skills in psychological report writing.

(f) The capacity to interview, consult, and counsel with school personnel, parents, pupils, and others.

(g) The capacity to plan and implement classroom management procedures pertaining to behavior of pupils.

(h) Competency in the planning and prescribing of teaching and curriculum strategies for pupils.

(i) The acquisition and mastery of a broad understanding of the psychology of learning and learning impairments of pupils.

(j) A comprehensive understanding of personality development and the assessment of human behavior.

(k) The capacity to communicate his psychological findings to professionals, parents, pupils, and others in a meaningful manner.

R 340.1157 School diagnostician.

Rule 7. The department of education shall approve as a school psychologist a person employed, approved, or eligible for approval as a school diagnostician prior to the effective date of these rules. Persons eligible for approval may seek approval within 5 years of completion of their program. A person enrolled in a school diagnostician training program prior to September 1, 1973, shall receive approval by the department as a school psychologist upon completion of his program.

R 340.1158 Use of the title "school psychologist."

Rule 8. Only persons approved by the department of education as school psychologists, in accordance with these rules, shall use such title.

APPENDIX D

SUPPLEMENTARY TABLES

Table 28: ANOVA summary of significant F-ratios ($p < .05$) for interest in specific continuing education topics Demographic effects.

Special Education Topic	Gender (df=2)		Educational Level (df=2)		Years of Experience (df=4)		Employment Location (df=3)		Work Setting (df=2)	
	N	F	N	F	N	F	N	F	N	F
Consultation	565	3.695								
Consultation with families	564	5.996			540	2.978				
Prereferral consultation										
Neuropsychological assessment	569	13.033								
Behavioral & classroom management	568	6.628					566	2.713		
Clinical assessment using DSMIII-R	567	5.765								
Pediatric psychopharmacology	567	8.029								
Personality assessment										
Parenting education	563	3.904					551	2.800		
Developing peer intervention	565	16.942	562	4.960			553	3.334		
Curriculum-based assessment	559	10.278			536	2.599	547	4.368		
Preschool assessment	565	21.729			541	3.511				

Table 28: Continued.

Special Education Topic	Gender (df=2)		Educational Level (df=2)		Years of Experience (df=4)		Employment Location (df=3)		Work Setting (df=2)	
	N	F	N	F	N	F	N	F	N	F
Alternative service models			564	6.437						
Cognitive behaviors therapy	566	5.248								
Group counseling methods	567	14.330								
Consultation with physicians	506	11.711								
Computer skills	568	15.199					557	5.667		
Authentic assessment	563	13.977								
Inclusion models	559	17.240								
Outcome-based education	561	6.105	558	5.375			550	14.061		
Consult. with mental health agencies			561	10.523	541	2.972				
Curriculum planning			561	4.080						
Program evaluation methods										
School restructuring										
Student assistance programs					541	4.049	552	11.572	553	4.01

Table 28: Continued.

Special Education Topic	Gender (df=2)		Educational Level (df=2)		Years of Experience (df=4)		Employment Location (df=3)		Work Setting (df=2)	
	N	F	N	F	N	F	N	F	N	F
Human growth & development										
Counseling methods									549	5.70
Infant assessment					541	3.226				
Collaboration with social agencies	563	5.276	560	5.095					552	3.06
Cultural & ethnic differences			555	3.410	537	2.484				
Low-incidence assessment	565	5.231	562	3.878						
Special needs of the gifted					540	3.690				
Research design & analysis										
Bilingual assessment										

Note: Ns differ for each question because not all persons answered all items of the questionnaire.

Table 29: Means and standard deviations for specific interest topics by gender.

Question	Males		Females	
	Mean	SD	Mean	SD
Consultation	1.9630	.8398	1.8173	.9295
Consultation with families	2.0857	.9171	1.8092	.8961
Neuropsychological assessment	2.3156	1.1087	1.8944	1.0298
Behavioral and classroom management	2.1388	.8667	2.1610	1.0148
Clinical assessment using DSMIII-R	2.4531	1.1429	2.0991	1.0731
Pediatric psychopharmacology	2.4612	1.1468	2.0988	1.0599
Parent education	2.3992	1.0568	2.1950	1.0466
Peer intervention	2.4344	.9728	2.2866	1.0363
Group counseling methods	2.5429	1.0879	2.3542	1.1506
Consultation with physicians	2.5650	.9948	2.3634	.9898
Computer skills	2.4836	1.1128	2.6273	1.2117
Authentic assessment	2.7555	1.0478	2.4388	1.0275
Inclusion models	2.7090	1.0150	2.5062	1.0564
Outcome-based education	2.5902	1.0483	2.6044	1.1135
Collaboration with social agencies	3.0286	.9339	2.6916	.9882
Low-incidence assessment	3.0412	1.0277	2.8182	1.0837
Cognitive behavioral therapy	2.4187	1.1283	2.4063	1.1214
Curriculum-based assessment	2.3878	1.0600	2.3320	1.0899
Preschool assessment	2.5802	1.1119	2.2118	1.1932

Table 30: Means and standard deviations for specific interest topics by educational level.

Question	Master's		Educ. Specialist		Doctorate	
	Mean	SD	Mean	SD	Mean	SD
Developing peer intervention	2.2733	.9917	2.3231	.9988	2.5313	1.0558
Alternative service models	2.6630	.9671	2.3277	1.0370	2.5368	1.0600
Outcome-based education	2.4882	1.0334	2.5690	1.0668	2.8737	1.1967
Consultation with mental health agencies	2.6802	.9776	2.6047	.9825	2.6837	1.1630
Curriculum planning	2.5814	.9908	2.5405	1.0665	3.0957	1.0783
Collaboration with social agencies	2.8529	.9209	2.7365	.9628	3.0928	1.0809
Cultural and ethnic differences	2.8890	.9789	2.8311	1.0633	2.9158	1.1910
Low-incidence assessment	2.8412	1.0192	2.8441	1.0348	3.2340	1.1832

Table 31: Means and standard deviations for specific interest topics by years of experience.

Question	1-5 Years		6-10 Years		11-15 Years		16-20 Years		20+ Years	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Consultation with families	2.0390	1.0316	1.8624	.8972	1.9060	.9252	1.9750	.9209	1.9121	.8386
Curriculum-based assessment	2.5844	1.1044	2.4857	1.0657	2.6443	.9869	2.7167	.8810	2.7802	1.0934
Consult. with mental health agencies	2.1818	1.0849	2.4247	1.1152	2.3557	1.0595	2.5000	1.0924	2.5056	1.0127
Student assistance programs	2.2597	.9652	2.6606	1.0112	2.6803	1.0662	2.7059	1.0197	2.8539	1.1135
Infant assessment	2.7105	1.2943	2.6729	1.3582	2.8333	1.2737	2.7797	1.0383	2.8370	1.3200
Cultural & ethnic differences	2.5974	1.1033	2.8165	1.0985	2.7635	1.0058	3.1348	.9994	3.0112	1.0713
Special needs of the gifted	2.9091	1.2374	3.0741	1.1249	3.1554	1.0082	3.2017	1.0623	3.0682	1.1724
Preschool assessment	2.2078	1.1161	2.3578	1.2059	2.4082	1.1690	2.3559	1.2091	2.5000	1.4410
Parenting education	2.1039	.9812	2.2569	1.0836	2.1959	1.0345	2.5042	1.0074	2.3556	1.1349

Table 32: Means and standard deviations for specific interest topics by employment location.

Question	Urban		Suburban		Rural		Small Town	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Behavioral & classroom management	2.2245	1.0054	2.1435	.9499	2.1271	.9387	2.0244	.9159
Parenting education	2.2721	1.0763	2.2679	1.0897	2.4052	1.0466	2.1341	.9265
Developing peer interventions	2.3586	1.0184	2.3190	1.0663	2.3190	.9381	2.4146	.9680
Curriculum-based assessment	2.4384	1.0568	2.4218	1.1029	2.1749	1.0642	2.1975	1.0419
Computer skills	2.4690	1.2696	2.5429	1.1618	2.7787	1.0173	2.5488	1.0790
Outcome-based education	2.5616	1.1505	2.6635	1.1087	2.5641	1.0698	2.5244	.9326
Student assistance programs	2.7361	1.0034	2.6411	1.0965	2.5812	1.0050	2.5976	.9669

Table 33: Means and standard deviations for specific interest topics by work setting.

Question	Public Schools		Special Center Schools		Other	
	Mean	SD	Mean	SD	Mean	SD
Student assistance programs	2.6243	1.0543	3.0000	.8165	3.0000	1.0954
Counseling methods	2.7094	1.2624	2.5357	1.5749	3.1667	1.3292
Collaboration with social agencies	2.8292	.9646	2.7500	1.1097	3.5000	1.0488

Table 34: Summary of statistically significant results for each research question.

Research Question 1: Which option, the six-semester-credit option gained through attending college or university courses, the 18 SBCEUs, or a combination of these two options, do school psychologists prefer in meeting the continuing education requirement?					
Option	Gender	Educational Level	Years of Experience	Employment Location	Work Setting
6 credits					
18 SBCEUs					
Credit/SBCEU comb.		X	X	X	
Research Question 2: Which type of continuing education sponsor do school psychologists prefer in meeting the new requirement?					
Sponsor	Gender	Educational Level	Years of Experience	Employment Location	Work Setting
College Credit Local district/ISD					
College/university					
MASP	X				X
SBCEUs Local district/ISD	X		X	X	
Institutional					
Professional organiz.					

Table 34: Continued.

Research Question 3: Which type of context do school psychologists prefer in meeting the new requirement?					
Type/Context	Gender	Educational Level	Years of Experience	Employment Location	Work Setting
College credit option Series of short courses	X	X			X
TV courses					
SBCEU option Frequency					
Time span				X	
Time of day				X	
Research Question 5: Do school psychologists have release time available from their employers to attend SBCEU activities necessary to complete the continuing education requirement?					
	Gender	Educational Level	Years of Experience	Employment Location	Work Setting
Release time		X		X	

Table 34: Continued.

Research Question 6: Are school psychologists reimbursed by their employers for continuing education activities? If so, how much reimbursement is available?					
Type of Reimbursement	Gender	Educational Level	Years of Experience	Employment Location	Work Setting
Tuition for credit					
Conf./convention fees	X			X	
Full reimbursement					
Partial reimbursement					
Research Question 7: How close to sponsors of SBCEU opportunities are school psychologists? How far are they willing to travel to participate in SBCEU activities?					
Type	Gender	Educational Level	Years of Experience	Employment Location	Work Setting
College credit	X			X	
SBCEUs			X	X	
How far willing to travel					
College credit			X	X	
SBCEUs		X		X	

Table 34: Continued.

Research Question 8: Is there interest in developing an area of specialization within the practice of school psychology If so, in what area--by school age or by disability category?					
Type	Gender	Educational Level	Years of Experience	Employment Location	Work Setting
School age	X		X		X
Disability category	X	X	X		
Research Question 9: What is the level of interest in continuing education topics related to the general categories of expected competencies required in state regulation R380.203, which defines the expected role of school psychologists in Michigan?					
Competency	Gender	Educational Level	Years of Experience	Employment Location	Work Setting
Assessment		X	X		
Consultation	X				
Counseling					
Curriculum	X	X			
Intervention	X	X			
Prevention	X	X			

Table 34: Continued.

Research Question 10: What is the level of interest in specific continuing education topics found in the current literature that relate to the competency areas?					
Topic	Gender	Educational Level	Years of Experience	Employment Location	Work Setting
Consultation	X				
Consultation--families	X		X		
Prereferral consultation					
Neuropsychological assessment	X				
Behavioral & classroom management	X			X	
Clinical assessment using DSMIII-R	X				
Pediatric psychopharm.	X				
Personality assessment					
Parenting education	X			X	
Developing peer intervention	X	X		X	
Curriculum-based assessment	X		X	X	

Table 34: Continued.

	Gender	Educational Level	Years of Experience	Employment Location	Work Setting
Preschool assessment	X		X		
Alternative service models		X			
Cognitive behaviors therapy	X				
Group counseling methods	X				
Consultation with physicians	X				
Computer skills	X			X	
Authentic assessment	X				
Inclusion models	X				
Outcome-based education	X	X		X	
Consultation with mental health agencies		X	X		
Curriculum planning		X			

Table 34: Continued.

	Gender	Educational Level	Years of Experience	Employment Location	Work Setting
Program evaluation methods					
School restructuring					
Student assistance programs			X	X	X
Human growth & develop.					
Counseling methods					X
Infant assessment			X		
Collaboration with social agencies	X	X			X
Cultural & ethnic differences		X	X		
Low-incidence assessment	X	X			
Special needs of the gifted			X		
Research design & analysis					
Bilingual assessment					

Note: An "X" in a particular column indicates that the results for that demographic variable were found to be significant.

REFERENCES

REFERENCES

Alpert, J. (1985). Change within a profession: Change, future, prevention, and school psychology. American Psychologist, 40, 1112-1121.

Alpert, J. (1992). Child abuse and neglect: Perspectives on a national emergency. Journal of Social Distress and the Homeless, 1, 223-236.

Ammon, P. R., & Hutcheson, B. P. (1989). Promoting the development of teachers' pedagogical conceptions. Genetic Epistemologist, 17, 23-30.

Anderson, W., & Hohenshil, T. (1990). Vocational assessment in the USA: School psychology's evolving roles. School Psychology International, 11, 91-97.

Anderson, W., Hohenshil, T., & Brown, D. (1984). Job satisfaction among practicing school psychologists: A national study. School Psychology Review, 13, 225-230.

Babbie, E. (1989). The practice of social research. Belmont, CA: Wadsworth.

Bardon, J. (1976). The state of the art and sciences of school psychology. American Psychologist, 31, 785-791.

Bardon, J. (1982). School psychologists' dilemma: A proposal for its resolution. Professional Psychology, 13, 955-968.

Bardon, J. (1983). Psychology applied to education: A specialty in search of an identity. American Psychologist, 38, 185-196.

Bardon, J. (1989). The school psychologist as an applied educational psychologist. In R. C. D'Amato & R. S. Dean (Eds.), The school psychologist in nontraditional settings: Integrating clients, services, and settings (pp. 1-32). Hillsdale, NJ: Erlbaum.

Benson, J., & Hughes, J. (1985). Role definition processes in school psychology. School Psychology Review, 14, 64-74.

Bradley-Johnson, S., Johnson, C., & Jacob-Timm, S. (1993). Where will--and where should--changes in education leave school psychology? Journal of School Psychology, 33, 187-200.

Brewster, M. (1997). Practitioner update on autism. School Psychologist, 51, 12.

Broadwater, R. (1995, October). NASP CPD chair. Personal communication.

Brown, D. (1989a). Commentary on NASP at twenty: Accreditation, public policy, and child advocacy. School Psychology Review, 18, 174-176.

Brown, D. (1989b). The evolution of entry level in school psychology: Are we now approaching the doctoral level? School Psychology Review, 18, 11-15.

Brown, D. (1994a). Psychological consultation: Introduction to theory and practice. Boston, MA: Allyn & Bacon.

Brown, D. (1994b). Will the real school psychologist please stand up: Is the past a prologue to the future of school psychology? School Psychology Review, 23, 589-600.

Brown, D., Pryzwansky, W., & Schulte, A. (1987). Psychological consultation: Introduction to theory and practice. Boston: Allyn & Bacon.

Carlson, C., Paavola, J., & Talley, R. (1995). Historical, current, and future models of schools as health care delivery settings. School Psychology Quarterly, 10, 184-202.

Cheramie, G., & Sutter, E. (1992). Role expansion in school psychology: The need for primary and secondary prevention services. Psychology in the Schools, 30, 53-59.

Christenson, S. (1991). Authentic assessment: Straw man or prescription for progress? School Psychology Quarterly, 6, 294-299.

Clarizio, H., & Halgren, D. (1993). Stability of special education placements: Data-based policy consultation. Journal of Educational and Psychological Consultation, 4(1), 49-67.

Cobb, C. (1989). Is it time to establish the doctorate entry-level? School Psychology Review, 18, 16-19.

Conoley, J., & Conoley, C. (1982). School consultation: A guide to practice and training. New York: Pergamon.

Cook, V., & Patterson, J. (1977). Psychologists in the schools of Nebraska: Professional functions. Psychology in the Schools, 14, 371-376.

Costenbader, V., Swartz, J., & Petrix, L. (1992). Consultation in the schools The relationship between preservice training, perception of consultative skills, and actual time spent in consultation. School Psychology Review, 21, 95-108.

Crocker, L., & Algina, J. (1986). Introduction to classical and modern test theory. New York: Holt, Rinehart & Winston.

Curtis, M., & Meyers, J. (1985). Best practices in school-based consultation: Guidelines for effective practice. In A. Thomas & J. Grimes (Eds.), Best practices in school psychology (pp. 79-94). Kent, OH: National Association of School Psychologists.

Curtis, M., & Meyers, J. (1988). Consultation: A foundation for alternative services in the schools. In J. Graden, J. Zins, & M. Curtis (Eds.), Alternative educational delivery systems: Enhancing instructional options for all students (pp. 35-48). Washington, DC: National Association of School Psychologists.

D'Amato, R. (1990). A neuropsychological approach to school psychology. School Psychology Quarterly, 5, 141-160.

Dubin, S. (1972). Obsolescence or lifelong education: A choice for the profession. American Psychologist, 27, 486-498.

Epps, S., & Jackson, B. (1991). Professional preparation of psychologists for family-centered service to at-risk infants and toddlers. School Psychology Review, 20, 498-509.

Fagan, T. (1985). Sources for the delivery of school psychological services, 1890-1930. School Psychology Review, 14, 378-382.

Fagan, T. (1987). School psychology's dilemma: Reappraising solutions and directing attention to the future. School Psychology Review, 16, 6-21.

Fagan, T. (1992). Compulsory schooling, child study, clinical psychology and special education. American Psychologist, 47, 236-243.

Fagan, T. (1993). Separate but equal: School psychology's reach for organizational identity. Journal of School Psychology, 31, 1-89.

Fagan, T., & Wise, P. (1994). School psychology, past, present and future. White Plains, NY: Longman.

Farling, W., & Hoedt, K. (1971). National survey of school psychologists. Washington, DC: National Association of School Psychologists. (ERIC Document Reproduction Service No. ED 061 553)

Farmer, J., & Peterson, L. (1995). Pediatric traumatic brain injury: Promoting successful school reentry. School Psychology Review, 24, 230-243.

Feil, E., & Becker, W. (1993). Investigation of multiple-gated screening systems for preschool behavior problems. Behavioral Disorders, 19, 44-53.

Figeroa, R., Fradd, S., & Correa, V. (Eds.). (1989). Meeting the multicultural needs of the Hispanic students in special education. Exceptional Children, 56, 12-26.

Fowler, F. (1993). Survey research methods. Newbury Park, CA: Sage.

Fraenkel, J. R., & Wallen, N. E. (1993). How to design and evaluate research in education (2nd ed.). New York: McGraw-Hill.

Fredriksson, J. (1986). Consultation as an approach of a school psychologist. Psychologia, 21, 261-266.

Fugate, D. (1993). Perceived conceptual bases and acceptability of curriculum-based assessment among school psychologists. Unpublished doctoral dissertation, Michigan State University.

Goldwasser, E., Meyers, J., Christenson, S., & Graden, J. (1983). The impact of PL 94-142 on the practice of school psychology: A national survey. Psychology in the Schools, 20, 153-165.

Graden, J. (1989). Reactions to school consultation from a problem-solving perspective. Professional School Psychology, 4, 29-35.

Graden, J., Christenson, S., Ysseldyke, J., & Meyers, J. (1984). A national survey of students' and practitioners' perceptions of training. School Psychology Review, 13, 397-405.

Graden, J., Zins, J., & Curtis, M. (1988). Alternative educational delivery systems: Enhancing instructional options for all students. Washington, DC: National Association of School Psychologists.

Gresham, F., & Gansle, K. (1992). Misguided assumptions of DSM-R: Implications for school psychological practice. School Psychology Quarterly, 7, 79-95.

Grimes, J. (1981). Shaping the future of school psychology. School Psychology Review, 10, 206-231.

Grubb, R. D. (1981). Shaping the future of school psychology: A reaction. School Psychology Review, 10, 243-258.

Gutkin, T. (1980). Teacher perceptions of consultation services provided by school psychologists. Professional Psychology, 11, 637-645.

Gutkin, T., & Curtis, M. (1990). School-based consultation: Theory, techniques, and research. In T. Gutkin & C. Reynolds (Eds.), Handbook of school psychology (pp. 577-611). New York: John Wiley.

Harberts, J. (1993, May). Director of Staff Development, Grand Rapids Public Schools. Personal communication.

Herrera, M., & Carey, K. (1993). Child sexual abuse: Issues and strategies for school psychologists. School Psychology International, 14, 69-81.

Hicks, P. (1994, Winter). Vocational assessment and planning: School psychology's opportunity for role diversification. Vocational Evaluation and Work Adjustment Bulletin, 143-148.

Houle, C. (1980). Continuing learning in the professions. San Francisco, CA: Jossey-Bass.

Huebner, E. (1992). Burnout among school psychologists: An exploratory investigation into its nature, extent, and correlates. School Psychology Quarterly, 7, 129-136.

Huebner, E., & Mills, L. (1994). Burnout in school psychology: The contributions of personality characteristics and role expectations. Special Services in the Schools, 8, 53-67.

Hughes, J. (1979). Consistency of administrators' and psychologists' actual and ideal perceptions of school psychologists' activities. Psychology in the Schools, 16, 234-239.

Hughes, J., & Clark, R. (1983). Differences between urban and rural school psychology: Training implications. Psychology in the Schools, 18, 191-196.

Hynd, G. (1992). Misrepresentation or simply misinformed? Comment on Gresham and Gansle's article regarding the DSM. School Psychology Quarterly, 7, 100-103.

Hynd, G., Pielstick, N., & Schakel, N. (1981). Continuing professional development in school psychology: Current status. School Psychology Review, 10, 480-486.

Hynd, G., & Schakel, N. (1981). Continuing education and school psychology: A review of state requirements. Psychology in the Schools, 18, 303-308.

Jerrell, J. (1984). Boundary spanning functions served by rural school psychology. Journal of School Psychology, 15, 171-182.

Kamphaus, R. (1991). Authentic assessment and content validity. School Psychology Quarterly, 6, 300-306.

Kamphaus, R., Frick, P., & Lahey, B. (1991). Methodological issues and learning disabilities in clinical populations. Journal of Learning Disabilities, 24, 613-618.

Kern, L., Childs, K., Dunlap, G., & Clarke, S. (1994). Using assessment-based curricular intervention to improve the classroom behavior of a student with emotional and behavioral challenges. Journal of Applied Behavior Analysis, 27, 7-19.

Knoff, H. (1993). The utility of human figure drawings in personality and intellectual assessment: Why as why? School Psychology Quarterly, 8, 191-196.

Kratochwill, T., & Plunge, M. (1991). DSM-III-R, treatment validity and functional analysis: Further considerations for school psychologists. School Psychology Quarterly, 7, 227-232.

Kubiszyn, T. (1994). Pediatric psychopharmacology and prescription privileges: Implications and opportunities for school psychology. School Psychology Quarterly, 9, 26-40.

Lacayo, N., Sherwood, G., & Morris, J. (1983). Daily activities of school psychologists: A national survey. Psychology inthe Schools, 18, 184-190.

Lesiak, W., Petty, S., & Braccio, J. (1975). The multiplier effect: A strategy for the continuing education of school psychologists. Psychology in the Schools, 12, 393-401.

Levinson, E., Fetchkan, R., & Hohenshil, T. (1988). Job satisfaction among practicing school psychologists revisited. School Psychology Review, 17, 101-112.

Lidz, C. (1990). The pre-school learning assessment device: An approach to the dynamic assessment of young children. European Journal of Psychology of Education, 5, 167-175.

Lolli, A. (1980). Implementing the role of school psychologist. Psychology in the Schools, 17, 70-74.

Manley, R., & Manley, E. (1978). A comparison of the personal values and operative goals of school psychologists and school superintendents. Journal of School Psychology, 16, 99-109.

McLinden, S., & Prasse, D. (1991). Providing services to infants and toddlers under PL 99-457: Training needs of school psychologists. School Psychology Review, 20, 37-48.

Meacham, M., & Peckham, P. (1978). School psychologists at three-quarters century: Congruence between training, practice, preferred role and competence. Journal of School Psychology, 16, 195-206.

Mehrens, W., & Clarizio, H. (1993). Curriculum-based measurement: Conceptual and psychometric considerations. Psychology in the Schools, 30, 241-254.

Miller, C., Witt, J., & Finley, J. (1981). School psychologists' perceptions of their work: Practices and possibilities. School Psychology International, 2, 1-5.

Morris, R., Bergan, J., & Fulginiti, J. (1991). Structural equation modeling in clinical assessment research with children. Journal of Consulting and Clinical Psychology, 59, 371-379.

National Association of School Psychologists. (1989). Directory of nationally certified school psychologists. Washington, DC: Author.

Noell, G., & Gresham, F. (1993). Functional outcome analysis: Do the benefits of consultation and prereferral intervention justify the costs? School Psychology Quarterly, 8, 200-226.

Nolte, D. (1994, Winter). Interdisciplinary approach to vocational evaluation/ assessment from a secondary education perspective. Vocational Evaluation and Work Adjustment Bulletin, 141-142.

Oakland, T. (1995). The bell curve: Some implications for the discipline of psychology and the practices of school psychology. School Psychology Review, 24, 20-26.

Oermann, J. (1996, November). Membership Chair, MASP. Personal communication.

Offord, D. R. (1996). The state of prevention and early intervention in research and development. In R. Peters & R. McMahon (Eds.), Preventing childhood disorders, substance abuse, and delinquency (pp. 324-344). Thousand Oaks, CA: Sage.

Pendavaris, E., & Howlee, A. (1996). Playing fair: The possibilities of gifted education. Journal of Education for the Gifted, 19(2), 215-233.

Pion, G., Mednick, M., Astin, H., et al. (1996). The shifting gender composition of psychology: Trends and implications for the discipline. American Psychologist, 51, 509-528.

Poland, S. (1994). The role of crisis intervention teams to prevent and reduce school violence and trauma. School Psychology Review, 23, 175-189.

Prout, H. T., Alexander, S. P., Fletcher, C. E., Memis, J. P., et al. (1993). Counseling and psychotherapy services provided by school psychologists: An analysis of patterns and practice. Journal of School Psychology, 31, 309-316.

Przywansky, W. (1986). School consultation: Some considerations from a cognitive psychology perspective. Professional School Psychology, 1, 1-14.

Ramage, J. (1979). National survey of school psychologists. School Psychology Digest, 8, 153-161.

Reschly, D. (1988). Special education reform: School psychology revolution. School Psychology Review, 17, 459-475.

Reschly, D., & Connolly, L. (1990). A comparison of school psychologists in the city and in the country: Is there a "rural" school psychology School Psychology Review, 19, 534-539.

Reschly, D., & Grimes, J. (1991). State department and university cooperation: Evaluation of continuing education in consultation and curriculum-based assessment. School Psychology Review, 20(4), 522-529.

Reschly, D., Kicklighter, R., & McKee, P. (1988). Recent placement litigation: Part 3. Analysis of differences in Larry P., Marshall, and S-1 and implications for future practices. School Psychology Review, 17, 39-50.

Reschly, D., & Wilson, M. (1995). School psychology practitioners and faculty: 1968 to 1991-2 trends in demographics, roles, satisfaction and system reform. School Psychology Review, 24, 62-80.

Riccio, C., Hynd, G., & Cohen-Morris, J. (1993). Neuropsychology in the schools: Does it belong? School Psychology International, 14, 291-315.

Romualdi, V., & Sandoval, J. (1995). Comprehensive school-linked services: Implications for school psychologists. Psychology in the Schools, 32, 306-317.

Rosenfield, S. (1981). Self-managed professional development. School Psychology Review, 19, 487-493.

Rosenfield, S. (1987). Instructional consultation. Hillsdale, NJ: Erlbaum.

Sapon-Sheva, M. (1996). Beyond gifted education: Building a shared agenda for school reform. Journal of Education for the Gifted, 19(2), 194-214.

Sewell, T. (1980). Shaping the future of school psychology: Another perspective. School Psychology Review, 10, 232-241.

Shapiro, E. (Ed.). (1981). The Olympia proceedings [Special issue]. School Psychology Review, 10(2).

Shapiro, E. (Ed.). (1982). Beyond Olympia: A plan for change [Special issues]. School Psychology Review, 11(2).

Shapiro, E., & Ager, C. (1992). Assessment of special education students in regular education programs: Linking assessment to instruction. Elementary School Journal, 92, 283-296.

Shapiro, E., & Eckert, T. (1994). Acceptability of curriculum-based assessment by school psychologists. Journal of School Psychology, 32, 167-183.

Shinn, M., & McConnell, S. (1994). Improving general education instruction: Relevance to school psychologists. Special section: Educational tools for diverse learners. School Psychology Review, 23, 351-371.

Short, R., Simeonsson, R., & Huntington, G. (1990). Early intervention: Implications of Public Law 99-457 for professional child psychology. Professional Psychology: Research and Practice, 21, 88-93.

Smith, D. (1984). Practicing school psychologists: Their characteristics, activities, and populations served. Professional Psychology: Research and Practice, 15, 798-810.

Sneft, L., & Snider, B. (1986). Elementary school principals assess services of school psychologists nationwide. Journal of School Psychology, 18, 276-282.

Stavrous, E., & French, J. (1992). The K-ABC and cognitive processing styles of autistic children. Journal of School Psychology, 30, 259-267.

Stoner, G., Carey, S., Ikeda, M., & Shinn, M. (1994). The utility of curriculum-based measurement for evaluating the effects of methylphenidate on academic performance. Special section: Behavior analysis in school psychology. Journal of Applied Behavior Analysis, 27, 101-113.

Swanzy, T. (1996). Special Education Records Clerk, Grand Rapids Public Schools. Personal communication.

Talley, R., Short, R., & Kolbe, L. (1996). School health: Psychology's role. Washington, DC: American Psychological Association.

Thomas, A., & Witte, R. (1996). A study of gender differences among school psychologists. Psychology in the Schools, 33, 351-359.

Tucker, J. (1982). The emperor's new clothes are hand-me-downs. School Psychology Review, 10, 271-278.

Watkins, C., Tipton, R., Manus, M., & Huntington-Shoup, J. (1991). Role relevance and role engagement in contemporary school psychology. Professional Psychology: Research and Practice, 22, 328-332.

Witherspoon, S. (1997, February 25). Office of Professional Preparation and Certification, Michigan Department of Education. Personal communication.

Wright, D., & Gutkin, T. (1984). School psychologists' job satisfaction and discrepancies between actual and desired work functions. Psychological Reports, 49, 735-738.

Wright, T., & Thomas, J. (1982). Role strain among school psychologists in the Midwest. Journal of School Psychology, 20, 96-102.

Yoshida, R., Maher, C., & Hawryluk, M. (1984). School psychology practice: Organizational barriers to professional attainment. Professional Psychology: Research and Practice, 15, 571-578.

Zins, J., & Ponti, C. (1990). Best practices in school-based consultation. In A. Thomas & J. Grimes (Eds.), Best practices in school psychology II (pp. 673-693). Washington, DC: National Association of School Psychologists.