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An Examination of the Relationship between Personal/Professional Experiences and Training of School Psychologists and Their Attitudes toward the Education of Gifted Students

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AN EXAMINATION OF THE RELATIONSHIP BETWEEN
PERSONAL/PROFESSIONAL EXPERIENCES AND TRAINING OF SCHOOL
PSYCHOLOGISTS AND THEIR ATTITUDES TOWARD THE EDUCATION OF
GIFTED STUDENTS

By

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Dissertation

Submitted to the Department of Leadership and Counseling

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in Partial Fulfillment of the Requirements for the degree of

DOCTOR OF EDUCATION

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Ypsilanti, MI

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DEDICATION

This dissertation is dedicated in love and gratitude to my wonderful husband, Steve, whose patience and caring made this and my every accomplishment possible.

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It is with much appreciation and great joy that I am now at the point where I can acknowledge the people who helped me throughout this dissertation process. First, I thank my amazing husband, Steve, my strongest supporter and cheerleader throughout this journey. Even when I might have given up, your words of encouragement kept me going...not to mention the cooking, cleaning, and child care you contributed without hesitation. I love you so much and honestly feel that this is an accomplishment for *both* of us.

I also thank my two beautiful daughters, Taylor and Hailey. Even though it might have seemed strange that mom was having to work in her office for weekends on end, you were always so patient and often a comic relief whenever I needed it. I love both of you with all my heart and soul.

I would never have had the courage to take on this endeavor if not for the love and support I had growing up with my amazing parents, Pete and Carol. You taught me that anything is possible if you believe in yourself, and I couldn't have asked for better role models. Thanks for always being there for me, Dad. Mom, you are my forever angel, and I miss you every day. I love you both so much.

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ABSTRACT

A resurgence of interest in gifted students and gifted education highlights the importance of examining attitudes of school psychologists related to the identification and programming for gifted students. This study explored the relationships between professional experiences, personal experiences, demographics, and previous training and the attitudes of school psychologists toward gifted students and gifted education.

A sample of 125 state-certified school psychologists in Michigan participated in a two-part, web-based survey, which provided descriptive data and measured attitudes toward gifted students and their education. Data were analyzed using a combination of descriptive and inferential statistics.

Seven findings were notable in this study: 1) Respondents to this study are generally supportive of gifted students and their education, although they held a neutral or slightly negative view of accelerating gifted students. 2) Male school psychologists, more than female, consider gifted education to be elitist. 3) Demographic factors, including age, ethnicity, years of service, and education level are not statistically significant in relation to participating school psychologists' attitudes toward gifted education. 4) School psychologists who report themselves or those close to them as gifted are also likely to have had more training in gifted education in graduate school, and 5) school psychologists who work with regular education students show a greater likelihood of reporting themselves or those around them as gifted. 6) school psychologists who work with regular education students tend to have a more negative view towards the gifted population than those who do not work with regular education students, and 7) school psychologists who feel that their

training in special education was less than adequate, also tend to view gifted students more negatively.

The findings in this study suggested that positive attitudes about the gifted and thus, behavior leading toward increased interest in working with *all* children with special needs, would improve if more graduate school training about giftedness and one-on-one experiences with gifted students were available. Acting upon changes suggested in the literature and the findings of this study, schools could improve the attitudes of school psychologists and better ensure that gifted students are properly identified and engaged in programming well-suited to their needs. These changes would benefit this often-underserved special population that has unlimited potential to serve this nation and mankind.

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CHAPTER I: INTRODUCTION

...failure to help the gifted child reach his potential is a societal tragedy, the extent of which is difficult to measure but what is surely great. How can we measure the sonata unwritten, the curative drug undiscovered, the absence of political insight? They are the difference between what we are and what we could be as a society.

James J. Gallagher (2002, p. 7)

Few would argue that Gallagher's quote speaks to the heart of what Americans seem to prize most: achievement and creative production. However, fears of elitism (McCoach & Siegle, 2007) and the tension between excellence and equity in the American educational system have led to a historically ambivalent attitude toward gifted students and gifted education (Gallagher, 1994). We desire excellence but also want equity, especially in the current era of No Child Left Behind (2001). Equity of instruction and achievement appears to have precedence over raising the academic bar for those students who require a challenge and are striving toward excellence (McCoach & Siegle, 2007).

In the last few years, however, there has been a resurgence of interest about gifted students and gifted education (Davidson & Davidson, 2005). Perhaps it is due, in part, to the current political global climate and the understanding that our brightest students may soon be the answer to America's problems. Perhaps it is due to vocal groups of parents and educators, who are making the needs of exceptional students known, or perhaps the heightened interest is simply due to the swinging pendulum of ideas in the field of education. Regardless of the source of the recent interest by the American public in gifted students, research needs to move forward to examine current attitudes of those who identify and assess

these special groups of students. It is important to examine the factors that contribute to the identification and programming of gifted students by the people who work with these students from the outset: school psychologists. Studying the effects of training and past experiences on attitudes that contribute to the identification and programming of gifted students will provide a better understanding of why some districts seem to do a better job than others of educating these exceptional groups of students.

Statement of the Problem

I have always believed, and those who participated in the pilot study of this research seemed to agree, that there is a significant gap in the training of school psychologists regarding educational programming of gifted students. However, this idea would contradict the professional standards endorsed by the National Association of School Psychologists (NASP, 2010). According to Section 2.8, regarding Diversity of Development and Learning, NASP's publication, Professional Standards for Graduate Preparation of School Psychologists, stated that school psychologists should have *knowledge* in the areas of "individual differences, abilities, disabilities, and other diverse characteristics of people in settings in which school psychologists work" (p. 15). Furthermore, school psychologists should be able to demonstrate *skills* to "provide effective professional services in data-based decision making, consultation and collaboration, and direct and indirect services for individuals, families, and schools with diverse characteristics, cultures, and backgrounds and across multiple contexts, with recognition that an understanding of and respect for diversity and in development and learning is a foundation for all aspects of service delivery" (p. 15).

Clearly, the intent and desire to adequately educate *all* children is evident throughout the association's professional standards. However, it seems that so few school psychologists

work to identify this special population of gifted students or take time to use data-based decision-making, as we do so readily with the disabled population in our schools, to find the best possible programming to help these students to excel.

One argument that cannot be overlooked is that the government legislation of No Child Left Behind (NCLB, 2001) guided graduate school training of school psychologists more firmly toward identification of children with disabilities and use of data-based decision-making to program for the needs of handicapped children in the classroom. Given the strong push to educate all children to at least a minimal competency, Kronholz, (2010) and other critics of NCLB have contended that the law so narrowly defines learning that teachers must teach only to the test, and school psychologists, consequently, are spending a majority of their time consulting with teachers about how to help students who are struggling the most. Kronholz cited Tomlinson, Coleman, Allan, Udall, and Landrum (1996), who averred that “Classrooms haven’t engaged anyone for a whole academic generation now” (p. 16). Bright, motivated students, who are looking for a challenge, often have to seek opportunities outside of school on their own because, according to Tomlinson, “Kids in the higher ranges of knowledge or skill find classes pretty desolate these days” (p. 16).

Educational leaders, in and out of the classroom, need to think about those gifted, bright students who are not as motivated to cultivate their talents without encouragement from home or school. Also of concern are minority, lower socioeconomic-level, or rural gifted students who do not have the opportunities of their counterparts. Gifted students *are* special needs students and, in fact, are addressed by NCLB (2001). Gifted learners are “Students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity or in specific academic fields, and

who need services and activities not ordinarily provided by the school in order to fully develop those capabilities” (No Child Left Behind, 2001). Identification of gifted students, according to this definition, is highly complex and involves the knowledge and expertise of professionals who understand research-based assessment, educational programming for special populations, and psychology with which to address the socio-emotional needs of the gifted. In my opinion, no other professional in the school system fits this definition better than a school psychologist.

The National Association of Gifted Children (NAGC, 2000) developed the Pre-K-Grade 12 Gifted Program Standards to assist school district leaders in programming for their gifted population. Under the heading of *Gifted Education Programming Criterion: Student Identification*, are five guiding principles for appropriate programming for advanced learners:

1. A comprehensive and cohesive process for student nomination must be coordinated in order to determine eligibility for gifted and education services.
2. Instruments used for student assessment to determine eligibility for gifted education services must measure diverse abilities, talents, strengths, and needs in order to provide students an opportunity to demonstrate any strengths.
3. A student assessment profile of individual strengths and needs must be developed to plan appropriate intervention.
4. All student identification procedures and instruments must be based on current theory and research.
5. Written procedures for student identification must include, at the very least, provisions for informed consent, student retention, student reassessment, student exiting, and appeals procedures. (p. 7)

The criteria for student identification into gifted programs gives further credence to the importance of involving professionals, such as school psychologists, who have all of the necessary background although, in some cases, perhaps not the precise training or experience with the gifted population.

Professionals in graduate school acquire knowledge in assessment, programming, and counseling for disabled students and, in real-world practice in schools, may determine that there is a population of special needs, gifted children who require the same type of intensive support. Why do some school psychologists, who did not have the requisite training with the gifted population, not seek out additional professional development on their own? Although it may be easy to blame the effect that NCLB has had on a school psychologist's current role in the schools, it does not explain the general reluctance of some school psychologists to be involved with the gifted population before NCLB was signed into law on January 8, 2002.

Purpose of the Study

This research study explored the relationships between professional and personal experiences and previous training and the attitudes of school psychologists toward gifted students and gifted education.

Rationale for the Study

Although research studies that examine attitudes toward the gifted are plentiful, as shown in Table 1, there are very few studies that look at attitudes toward gifted students and gifted programming by school psychologists specifically.

Table 1

Studies of Attitudes Toward Gifted Students by Various Populations

Populations	Authors/dates
Teachers	Cramond & Martin, 1987; Dettmer, 1981; Geake & Gross, 2008; Lee, Cramond, & Lee, 2004; McCoach & Siegle, 2007
Administrators	Cornish, 1964
Parents	Cornell, 1989; Ford, 1978; Karnes & Shwedel, 1987; Keirouz, 1990; Khatena, 1974; Windecker-Nelson, Melson, & Moon, 1997
Gifted Students	Colangelo & Kelly, 1983; Kerr, Colangelo, & Gaeth, 1988; Manaster, Chan, Watt, & Wiehe, 1994; Ramsay & Richards, 1997
Psychologists and Psychometrists	Wiener, 1968

A study completed in 1968 looked primarily at the attitudes of psychologists and psychometrists toward gifted students and programs for them. Findings indicated that of 252 school psychologists, 52 psychometrists, and 102 others in allied fields, the psychologists and psychometrists were the least favorable toward the gifted students and their programming. The present research added to the database on the subject of attitudes toward gifted students by exploring attitudes and also the relationship between previous professional experiences, personal experiences, and training of school psychologists. The results gave promising insight into the factors that surround school psychologists and their attitudes toward working with the gifted population.

Significance of the Study

The results of this study led the field of school psychology in a promising direction toward greater advocacy for gifted students and gifted education. Those in the field of psychology have known that behavior follows attitudes (i.e., if I hate chocolate, I don't eat chocolate). Thus, if the outcomes of this research show that professional and personal experiences with gifted children and training about gifted children and gifted education correlates highly with positive attitudes toward the gifted, then reasonable assumptions may be made that the need to further advocate for this special needs population requires added extensive course work in the field of gifted education in graduate programs in the field of school psychology. If training correlates highly with positive attitudes toward the gifted population and that professional/personal experiences correlates highly with positive attitudes toward the gifted population, more internship time is needed within gifted classrooms and with gifted students themselves. To change behavior toward greater advocacy for the gifted population, it is crucial to change toward more positive attitudes toward the gifted population. This study explored the link between training and experience of school psychologists and their subsequent attitudes and established the importance of studying this topic for school leaders within the field.

Conceptual Framework

School psychologists are vitally important to the identification and further programming of gifted students. Figure 1 is a conceptual model, developed by the researcher and based on the literature, to illustrate the general theory that life experiences impact subsequent attitudes toward people and things, which, in turn, can affect behavior.

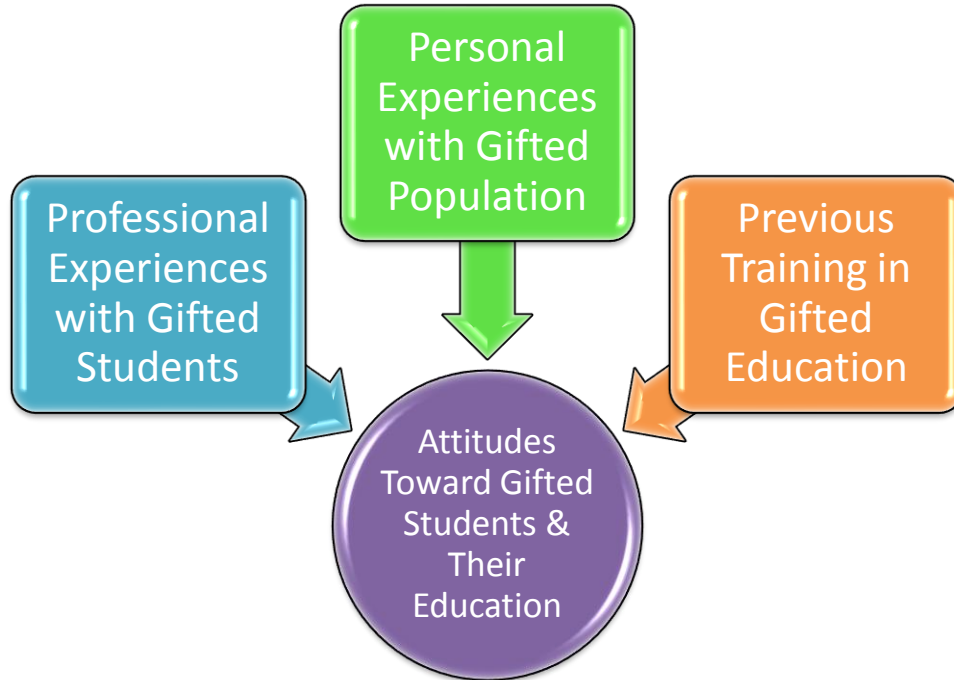


Figure 1. Variables that impact attitudes toward gifted students and their education.

This research study examined the impact of three independent variables: school psychologists' professional experiences, personal experiences, and previous training in gifted education on the dependent variable, attitudes toward gifted students and their education. Subscales of the survey, *Opinions about the Gifted and Their Education*, by Gagne and Nadeau (1991) and adapted by McCoach and Siegle (2007) were used to assess attitudes of school psychologists in the areas of support, elitism, acceleration, and self-perceptions.

Research Questions and/or Hypotheses

The following questions and null hypotheses investigated at a 0.05 level of significance guided this research:

- Q. 1. What is the relationship between previous personal experiences, demographics, and attitudes toward gifted students and gifted education of school psychologists?

Null Hypothesis: There is no relationship between personal experiences, demographics, and attitudes toward gifted students and gifted education of school psychologists.

Q. 2. What is the relationship between professional experiences, demographics, and attitudes toward gifted students and gifted education of school psychologists?

Null Hypothesis: There is no relationship between professional experiences, demographics, and attitudes toward gifted students and gifted education of school psychologists.

Q. 3. What is the relationship between previous training, demographics, and attitudes toward gifted students and gifted education of school psychologists?

Null Hypothesis: There is no relationship between previous training, demographics, and attitudes toward gifted students and gifted education of school psychologists.

Summary and Organization of the Study

This chapter included an introduction and background of issues related to attitudes of those who identify and assess gifted students, especially school psychologists. The purpose, rationale, and significance of the study, a conceptual framework, and the guiding research questions and hypotheses concluded the chapter. A review of relevant literature in Chapter II is followed by methods, details of the conduct of the study, and analysis of data in Chapter III. Findings related to the research questions are presented in Chapter IV. The final chapter comprises the conclusions, implications, and recommendations for further study.

CHAPTER II: REVIEW OF THE LITERATURE

The National Association for Gifted Children (NAGC) estimated that there are approximately three million academically gifted children in the United States (K-12 grade), approximately 6% of the U.S. population. Although no federal agency collects these data, the estimate stems from the 1972 Marland Report to Congress (Marland, 1972). This report estimated that five to seven percent of school children were capable of high performance and were in need of services or activities that were not normally provided by the school (The Twice Exceptional Dilemma, NEA, 2006).

Defining Giftedness

The difficulty in estimating percentages of gifted students stems in large part from the complicated issue of identifying these students and coming to a common definition of gifted. The term *gifted* was coined early in the 20th century by Terman in his study of genius, as cited by McCoach, Kehle, Bray, & Siegle (2001). It eventually became a part of our educational vocabulary; however, the definition is unclear. The lack of clarity exists because this population of students is highly diverse in the domains and levels of their abilities. The NAGC prefers to define gifted persons as those who show, or are capable of, an exceptional level of performance in one or more areas of expression (The Twice Exceptional Dilemma, NEA, 2006). The federal government defined gifted and talented students as those “who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services or activities not ordinarily provided by the school in order to fully develop those capabilities” (NCLB, 2004). A plethora of other definitions for the term *giftedness* ranges from extremely vague to highly specific in terms of scores on certain standardized tests. Although there is no universally

accepted definition of giftedness, for this research project, gifted students are defined as those who have demonstrated a high achievement in intellectual, creative, artistic, leadership capacity, and/or specific academic fields (Black, 2006).

Identification of the Gifted

When identifying students for programming, local school districts typically set rather operational criteria to determine who will be labeled and served as gifted (Robinson, 2002), which can lead to the situation of a child being identified as gifted in one district but perhaps not so in another. Ideally, the way giftedness is defined or conceptualized would provide a rationale for the way students are identified. Also, the goals of gifted programs and the identification process should correlate (Robinson, 2002). For instance, a supposed gifted math student should be given math aptitude tests. However, there seems to be no single way to identify gifted students. From my professional experience, I observed that of the 11 school districts in the intermediate school district (ISD) of Michigan's Ottawa County, no two districts identified gifted students in exactly the same way.

Careful identification of students with diverse abilities and backgrounds can help these students gain entry into gifted programming in a way that is non-discriminatory with respect to race, ethnicity, religion, and gender. Karnes and Marquardt (2000) cited *Simmons v. Board of Public Education* (1994) and *Keyes v. School District No. 1* (1995) regarding issues of gifted programming and diversity, and cited the case of *Rosenfeld v. Montgomery County Public Schools* (1999) in an issue of reverse discrimination.

Federal/State/Local Funding for Gifted Programming

It does not matter whether gifted programs are open to capable children if no programs are available. Unfortunately, adequate funding for gifted and talented programs is

often lacking, especially at the state and local education agency (LEA) levels where programs are at the mercy of the economy. The gifted fare poorly at the federal level as well. The NAGC found that in 2007, only .026% of the federal K-12 education budget went to gifted and talented students. This is compared with 3% to the Reading First Program, 1.59% to Drug Prevention, 1.10% to Education of Migrant Children, 1.85% to English Language Acquisition, 64% to the NCLB programs, and 32% to children with disabilities through the Individuals with Disabilities Education Act (IDEA). It is, therefore, somewhat of a misconception that the No Child Left Behind legislation (NCLB, 2001) provides for *all* children who were being *left behind* in one way or another. Although gifted and talented children and programs for them are mentioned throughout the law, not much funding is provided for this population. For instance, Title II: Preparing, Training, & Recruiting High Quality Teachers & Principals, Section 2122 states, “An LEA application for a sub-grant from the state must include an explanation of how the LEA will provide training to enable teachers to address the needs of students with different styles, particularly students with disabilities, with special learning needs (including students with gifts and talents)...” (Section 2122(b)(9)(A) (p. 210).

As with many other provisions in the law, gifted students are mentioned almost as an aside. In this instance, parents or advocates may wish to question their LEA about the staff training for addressing the special needs of gifted and talented students. Most local school districts provide little training of this type compared with training required for the disabled. One federal law specifically addresses gifted and talented students. The Jacob K. Javits Gifted and Talented Students Education Act of 1994 (20 U.S.C. §§ 8031 et seq.) authorizes federal funds for research and grants (CFDA Number: 84.206A) to support programs and

services of gifted and talented students. However, the Javits Act receives only 2.6 cents of every \$100 spent on education, as mentioned earlier (www.migiftedchild.org). With very little in the way of federal funding, gifted programming decisions are then made at the state and local levels. State laws vary widely and, therefore, result in a disparity among districts and available programming. In many states, as in Michigan, the fate of gifted and talented programs depends solely on local school budgets, which can fluctuate in today's economic climate (www.michigan.gov.mde).

Programming for the Gifted

Given the current economic climate and little federal funding, public school districts have to be very creative in how they choose to educate gifted students. There is a plethora of programming options for gifted students including pull-out enrichment classes (i.e., one hour per day with a gifted and talented (G/T) program teacher, ability grouping within general education, packaged programming, differentiation within general education, acceleration of grades, and many others (Reis & Ruban, 2005). The point is that a district can spend as much or as little money as they see fit, but there are options for the programs, no matter how much is available.

Rogers (2007) synthesized the research from 1861 to 2007 about educational practices of gifted children, including options for instructional management, instructional delivery techniques, and curriculum adaptation strategies. From this, five lessons were learned:

Lesson 1. “Gifted and talented learners need daily challenge in their specific areas of talent” (Rogers, 2007, p. 383). When these challenges (by a teacher, mentor, or tutor) are progressively difficult, they tend to lead to expert performance and achievement growth. A

previous synthesis of the research by Rogers (2002) found that when a student participates in a daily program of talent development, he/she progresses one third to one half an additional year's achievement growth. Bloom (1985) found an even more astonishing account, which showed that students achieve three years of academic growth per year when they engage in daily development of a specific talent. The author admitted that this rather astonishing rate of growth is probably more likely when a gifted student is given one-on-one tutoring rather than grouped instruction with a whole class of highly talented students, a like-performing cluster group, a like-peer dyad, or a like-ability cooperative group (Bloom, 1985). The literature also emphasized how important it is to find a structure outside of the mainstreamed classroom to offer these services and allow like-gifted students to learn from each other (Archambault, Westberg, Brown, Hallmark, Zhang, & Emmons (1993).

Lesson 2. “Opportunities should be provided on a regular basis for gifted learners to be unique and to work independently in their areas of passion and talent” (Rogers (2007) p. 385). Gifted learners, compared to regular learners, tend to prefer independent study, independent projects, and self-instruction materials (Rogers, 2002). However, for independent study to be truly successful, the gifted student must be task-committed and that can change from the elementary to the high school years (Haensley, 1980; Jeter & Chauvin, 1982). There are several curriculum models for setting up independent study for gifted learners, such as Bett’s (1986) autonomous learning model, Treffinger’s (1986) self-directed learning model, and Renzulli and Reis’s (1985) enrichment triad/school-wide enrichment model.

Lesson 3. Schools should “provide various forms of subject-based and grade-based acceleration to gifted learners as their educational needs require” (Roger, 2007, p. 386).

Subject-based acceleration includes the following options: Early entrance to school, subject acceleration, university-based programs, individualized distance or online learning, cross-graded classes, advanced placement or international baccalaureate courses, dual enrollment, college-in-the-schools, and mentorships (Rogers, 2007). The benefits of the above options range from one third to three fifths of a year's additional growth (Rogers, 2005). On the other hand, grade-based acceleration is typically defined as shortening of the actual years spent in the K-12 school system (Rogers, 2005). Grade-based acceleration includes the following options: Grade skipping, grade telescoping, non-graded or multi-grade classes, credit by examination, and early admission to college. The effects of these options range from one third of a year's growth to a full year's growth (Rogers, 2007).

Lesson 4. Schools should “provide opportunities for gifted learners to socialize and to learn with like-ability peers” (Rogers, 2007, p. 388). Grouping gifted learners by ability and performance has been found to be a common practice within the literature. Options include the following: Full-time ability grouping, performance grouping for specific instruction, within-class grouping, cluster grouping, and pull-out groups. The effects of the above options range from three fifths to one third of a year's additional growth. It is clear from the literature that grouping with like-ability and like-performing students shows both positive academic and social-emotional growth. The positive effects seem to be evident whether the exposure is part-time or full-time, however, the more time involved seems to yield the more positive results (Rogers, 2007).

Lesson 5. “For specific curriculum areas, instructional delivery must be differentiated in pace, amount of review and practice, and organization of content presentation” (Rogers, 2007, p. 390). In presenting material to gifted students Rogers pointed out that pace is one of

the most crucial areas of instructional delivery to consider. Interesting research was conducted by Start in 1995, who examined the learning rates of children for novel concepts and concluded that students with an IQ of 130 (two standard deviations above average) learn at a rate 8 times greater than a child with an IQ of 70 (two standard deviations below average). It then stands to reason that bright students should be presented material that is paced to their actual learning rate, as opposed to material that is paced for less capable students (Rogers, 2007).

When examining the amount of review and practice required by gifted students during a lesson, most of the literature focused on the academic area of mathematics. Usiskin (1987) and Sheffield (1999), as cited in Rogers (2007), both argued that “experiential learning in mathematics, using inquiry and problem-based strategies versus teaching for automaticity through drill and practice, leads to deeper mathematical understandings among gifted mathematicians” (p. 390).

Krutetskii (1976) found that many gifted mathematics students, as young as seven or eight years, were able to find hidden generalities in problems that other regular learners saw as separate elements. This ability to acquire and store information as a whole rather than as separate small, chunks is found to be a hallmark of gifted learners (Sternberg, 1986).

Therefore, to best teach to the needs of a gifted learner, teachers should “teach in a whole-to-part fashion by concepts, principles, issues, and generalizations rather than from the base-of-facts, terms, and parts of a whole idea” (Rogers, 2007, p. 391).

To provide for the increasingly diverse learners in the classroom, instructors must consider how they might provide the appropriate content in the appropriate manner. Some form of grouping will inevitably be required to differentiate on a direct and daily basis with

all types of learners. Research showed that gifted learners will probably need some combination of consistent challenge, daily talent development, independent work, whole-to-part instruction, fast-paced instruction, deep and complex material, and limited drill and review.

Tomlinson et al. (1996) said, “although gifted education has had and continues to have a role as a laboratory for testing, refining, and disseminating ideas...applicable to general education, it falls to well-educated teachers of the gifted to advocate for and meet the unique needs of gifted students” (p. 167).

Training of School Psychologists

Well-educated school psychologists also bear the responsibility of advocating for the unique needs of gifted students. Through graduate training, school psychologists help students succeed academically, socially, behaviorally, and emotionally. According to the standards set by the National Association of School Psychologists (NASP, 2010) in their publication, *Professional Standards for Graduate Preparation of School Psychologists*, “The key foundations for all services by school psychologists are understanding of diversity in development and learning; research and program evaluation; and legal, ethical, and professional practice” (p. 1). The NASP graduate preparation standards serve as a national model that assists state and national agencies in establishing standards for graduate education. As defined in the NASP standards, graduate education preparation for school psychologists is offered in specialist- and doctoral-level programs of study.

The specialist-level program of study in school psychology consists of a minimum of three years of full-time study, at least 60 graduate semester hours with at least 54 hours of credit for the supervised specialist-level internship experience, and the thesis. The doctoral-

level program of study consists of greater depth in one or more school psychology competencies identified by the program, a minimum of four years of full-time study, at least 90 graduate semester hours with at least 78 hours of credit for the supervised doctoral internship, and the dissertation (NASP, 2010).

All NASP-approved school psychology graduate training programs ensure that all candidates demonstrate basic professional competencies in knowledge and skills of the ten domains of school psychology: data-based decision-making and accountability; consultation and collaboration; interventions and instructional support to develop academic skills; interventions and mental health services to develop social and life skills; school-wide practices to promote learning; preventative and responsive services; family-school collaboration services; diversity in development and learning; research and program evaluation; and legal, ethical, and professional practice (NASP, 2010).

Nature of Attitudes

The nature of attitudes is a significant foundation of this study because school psychologists' attitudes about the education of gifted students were correlated with personal and professional experiences, and their training in gifted education. Those attitudes may affect whether students are identified as gifted and receive the proper programming.

The *tripartite theory* sets the groundwork for discussing the nature of attitudes. This theory maintains that attitudes are made up of three distinct components: Affective, cognitive, and behavioral. The affective component is made up of a person's emotions or feelings toward an object or person, the cognitive component is made up of a person's thoughts or beliefs about an object or person, and the behavioral component is made up of the actions or behaviors toward an object or person. Social psychologists have discovered

that although attitudes comprise the above three components, some attitudes are based primarily on the component of affect while others are based more on people's thoughts or behavior (Lawrence, 2006).

Prior Professional Experience as an Indicator of Attitude

Affect can be involved in the formation of attitudes because of the *mere exposure effect*. The mere exposure effect occurs when repeated exposure to a person or object leads to increased liking of the person or object (Bornstein, 1989). It seems to be a natural human response to like things the more we are exposed to them (Lawrence, 2006). One might assume that school psychologists who have had experience, or exposure, on a regular basis with gifted children would show increased positive feelings toward these children.

The process of *classical conditioning* also shows how affect can be involved in the formation of attitudes. Classical conditioning occurs when a neutral stimulus elicits a response when paired repeatedly with a stimulus that already produces that response (Lawrence, 2006). For instance, a cat who regularly hears the can opener sound immediately before he gets fed will associate the can opener sound with getting fed. Therefore, the cat may then come when he hears the can opener in anticipation of getting fed. It would be reasonable to assume that school psychologists who have regular, positive interactions with gifted children would associate working with this group of students with positive feelings. Subsequent behaviors should be ones of helping this special needs group given the classical conditioning process.

Operant conditioning is yet another way affective processes are at work in the formation of attitudes. Operant conditioning is "a type of learning in which behavior is strengthened if followed by a reinforcer or diminished if followed by a punisher" (Myers,

2005, p. 237). For instance, if a seal is fed a fish every time he performs a specific trick, it is likely that he will continue to perform that trick in order to get the reinforcer (the food). It could be assumed that a school psychologist, who gets accolades for improving the lives of gifted students, would be much more likely to repeat the helping behavior in the future.

Cognitive processes can be involved in the formation of attitudes (Myers, 2005). Attitudes can be formed about a person or object after gaining information, which can come from direct experience (e.g., going to Disney World) or indirect experience (e.g., reading about Disney World). If the experience leads to positive thoughts, people will form positive attitudes about the attitude object. However, if the experience leads to negative thoughts, people will form negative attitudes. Finally, attitudes based on direct experience tend to be much stronger than those based on indirect experience (Fazio & Zanna, 1978). One could assume that school psychologists who have had direct, positive experiences with gifted children might be more likely to report more positive attitudes than would those who have not had such experiences. Also, school psychologists who have scholarly interests in gifted children (i.e., enjoy researching and reading about gifted children and gifted education), although they may never have had direct experiences with them, would also report positive attitudes toward this group of students.

Prior Personal Experience as an Indicator of Attitude

Biological processes can also play a part in attitude formation. Research has shown that highly heritable personality traits or abilities tend to predispose people to form certain attitudes (Olson, Vernon, Harris, & Jang, 2001). Further, identical twins are much more similar in terms of their attitudes than are fraternal twins, and twins who are raised apart in separate households are as similar in attitudes as those twins who are raised together. These

findings suggested that attitudes may be greatly influenced by genetic factors (Myers, 2005). It could be assumed that the school psychologist who believes him or herself to be gifted will likely have a more positive attitude toward gifted children and gifted education. The school psychologist may feel a kinship toward the gifted student and may be more apt to go out of his or her way to help the student excel through appropriate identification and programming.

Training as an Indicator of Attitude

Attitude strength is a factor when considering the relationship between previous training and attitudes. Research has shown that attitudes become stronger when a person is very knowledgeable about the subject of the attitude. For instance, attending conferences, taking classes, or gaining certification in gifted education contribute to increased knowledge in the subject area. According to research on attitude strength, this increased knowledge should lead to stronger attitudes, either positive or negative, on the subject (Fazio & Zanna, 1978).

Festinger (1957) opined that *cognitive dissonance theory* can also play a part in looking at the connection between training and its effect on attitude. This theory is demonstrated when people behave in ways that contradict their attitudes and ultimately change their attitudes to ease tensions between the two inconsistencies. For instance, a college student who very much wants to join a sorority is asked to take part in some humiliating hazing ritual to prove her desire to be a part of the group. Cognitive dissonance may occur if the college student feels an uneasy tension between performing the ritual and her belief that this act is embarrassing and stupid. One of two concepts has to happen for the cognitive dissonance to ease; either the college student must change her behavior and not perform the act or she must change her attitude from thinking the act ridiculous and

unreasonable to accepting the act as reasonable behavior in light of the reputation of the sorority on campus or her desire to belong to that group.

Research suggested that cognitive dissonance can also result from *justification of effort*, the idea that if we work really hard for something that turns out to be not worth the effort, we experience dissonance. If it is too late to change our behavior, we instead change our perception of the event. Thereby, we change our attitude toward the event (Aronson & Mills, 1959). For instance, if a school psychologist takes college courses in gifted education and spends a great deal of time and money, yet finds the classes boring, he or she may feel inclined to report her attitude toward the subject matter as favorable to ease her cognitive dissonance between the cognitions.

Attitude as it Affects Behavior

The *theory of planned behavior* was developed by Ajzen and Fishbein in 1980 to predict human behavior based on attitude (Ajzen, 1991). The researchers found that intention was the best predictor of behavior, and that a person's intention was the cognitive representation of his or her readiness to perform a certain action. Goldsmith (2000) determined that intention was influenced by three factors: One's attitude toward the behavior, normative beliefs (expectations of others), and perceived control (presence of factors that may facilitate or impede performance of the behavior). Generally, this theory stated that if a person has a favorable attitude, societal expectations, and strong perceived control, then the person will likely perform the behavior. Therefore, one could infer that a school psychologist with a favorable attitude toward gifted students, in a district where all students were strongly supported, and perceived control over his or her duties was high, would likely assess and program for gifted students in that district.

Researchers have found that attitudes can be *explicit* or *implicit*. Explicit attitudes tend to be those of which a person is consciously aware and can easily report. Implicit attitudes tend to be those that are outside our conscious awareness (Wilson, Lindsey, & Schooler, 2000). This research study focused on explicit attitudes of school psychologists toward gifted students and gifted education and attempted to show a relationship between those attitudes and the factors of personal and professional experiences and training.

Summary

The literature concerning the nature of attitudes was summarized in this chapter. Additional topics included the definition of giftedness, the difficult process of identifying gifted students, funding of gifted programming, and the various educational elements contained within the programming of gifted students.

CHAPTER III: METHODS

The methods used to explore the relationships between professional experiences, personal experiences, and previous training and the attitudes of school psychologists' toward gifted students and gifted education are described in this chapter.

The following questions and null hypotheses investigated at a 0.05 level of significance guided this research:

Q. 1. What is the relationship between previous personal experiences, demographics, and attitudes toward gifted students and gifted education of school psychologists?

Null Hypothesis: There is no relationship between personal experiences, demographics, and attitudes toward gifted students and gifted education of school psychologists.

Q. 2. What is the relationship between professional experiences, demographics, and attitudes toward gifted students and gifted education of school psychologists?

Null Hypothesis: There is no relationship between professional experiences, demographics, and attitudes toward gifted students and gifted education of school psychologists.

Q. 3. What is the relationship between previous training, demographics, and attitudes toward gifted students and gifted education of school psychologists?

Null Hypothesis: There is no relationship between previous training, demographics, and attitudes toward gifted students and gifted education of school psychologists.

A quantitative method best fits these research questions. "Quantitative research is a formal, objective, systematic process in which numerical data are used to obtain information about the world. This research method is used to describe variables; to examine relationships

among variables; and to determine cause-and-effect interactions between variables” (Burns & Grove, 2005, p. 23).

This study surveyed a random sample of school psychologists drawn from the database of certified school psychologists in Michigan. The data-collection instrument for this study was a survey designed using the SurveyMonkey® web-based tool (See Appendix A). During October 2012, the randomly selected school psychologists were sent a consent letter (See Appendix B) with an email link to the online survey at surveymonkey.com. They were asked to complete the two-part survey providing descriptive data (demographic information and prior training with the gifted and disabled populations), and their attitudes toward gifted students and their education using a Likert scale. One week after the initial email, a follow-up email was sent to urge prospective participants to complete the survey (See Appendix C).

To assess the overall readability and understandability of the survey questions, a pilot study was conducted during the spring of 2009 using 13 certified school psychologists from 11 school districts that compose a West Michigan intermediate school district. The pilot group’s demographics aligned closely with those of school psychologists in Michigan and nationally as shown later in this chapter. Due to this study’s large scope, a quantitative survey approach was used to enable proper data collection and analysis.

Sample Selection

In August, 2012, participants for this study were randomly drawn from a list of all state-certified public school psychologists obtained from David Head, Freedom of Information Act (FOIA) Coordinator for the Michigan State Board of Education. Along with their names, the list included each school psychologist’s employing school district, gender,

and racial or ethnic background. Email addresses were obtained from each selectee’s public school district’s website. If an email address was not readily found, the next school psychologist on the list was selected. Follow-up emails were sent to the sample to encourage participation.

The demographics of this study’s respondents shown in Table 2 were closely aligned with those of both the total population of Michigan school psychologists in Table 3 and the National Association of School Psychologists’ (NASP) membership in Table 4.

Table 2

Respondent Demographics

Category	Frequency	Percentage	Mean
Age	125		42
Years working in the field	125		14
Gender	125	100	
Male	27	22	
Female	98	78	
Ethnicity*	124	100	
White	117	94	
Other	7	6	
Highest degree obtained	125	100	
EdD/PhD/PsyD	18	14	
EdS	97	78	
MA/MS/Med	8	7	
Bachelor	1	1	
Place of Employment	125	100	
Public School	123	98	
Private School	2	2	

* One participant did not respond to item regarding ethnicity.

The Michigan State Board of Education had record of 915 state-certified school psychologists as of August of 2012. Their demographics are summarized in Table 3.

Table 3

Composition of the 915 School Psychologists in Michigan as of August 2012

Category	Frequency	Percentage
Gender		
Male	220	24
Female	695	76
Ethnicity		
White	816	89
Black or African American	79	9
Hispanic or Latino	10	1
Asian American	7	1
American Indian	3	<1

NASP sets national guidelines for school psychology programs, monitors graduate-level programs and determines whether the programs receive accreditation. Every five years, NASP conducts a survey to determine the demographics of its more than 25,000 members. The last survey, conducted in 2009-2010, showed the breakdown in Table 4 (Castillo, Curtis, Chappel, & Cunningham, 2010).

Table 4

Composition of NASP Membership 2009-2010

Category	Mean	Percentage
Age	47.4	
Gender		
Male		23
Female		77
Ethnicity		
Caucasian		90.7
Hispanic		3.4
African American		3
Asian or Pacific Islander		1.3
Native American		.6
Other		1
Employment		
College or University		7.4
Mental Health Agency		.8
Private Practice		3.5
Private School		6.4
Public School		83.7
Other		4
Highest Degree Obtained		
EdD/PhD/PsyD		32.2
EdS		45.8
MA/MS/MEd		25.1

Data Collection

Data in this study were gathered using a two-part survey. Part I asked for descriptive data; demographics, work experience, and personal experience and prior training. Part II consisted of a portion of the “Opinions about the Gifted and their Education” scale developed by Gagne and Nadeau (1991). The scale used for this study was adapted by McCoach and Siegle (2007), and is a 20-item instrument designed to measure four factors (subscales) related to attitudes toward gifted students and gifted education. All items are measured using a 7-point Likert scale, which ranges from completely disagree, to completely agree .

The first subscale measures *Needs and Support*, and assesses the respondent’s beliefs regarding the needs of gifted children and the respondent’s level of support for special services for the gifted. A high score on this subscale indicates positive attitudes toward gifted students.

The second subscale measures *Elitism*, which assesses the respondent’s concerns about elitism and the favored status that gifted students may have in school, and that gifted people may have within society in general. A high score on this subscale indicates that the respondent has a more negative attitude toward the gifted.

The third subscale measures *Acceleration*, which assesses the respondent’s attitudes toward acceleration of academically gifted students in school. A high score on this subscale, indicates a more negative attitude toward gifted students. The fourth, subscale measures *Self-perceptions* and indicates whether the respondent perceives himself or herself as gifted.

Subscale 1. – Needs and Support.

1. Our schools should offer special education services for the gifted.
2. The gifted need special attention to fully develop their talents.

3. Tax payers should not have to pay for special education for the minority of children who are gifted. (Reversed scored)
4. Since we invest supplementary funds for children with difficulties, we should do the same for the gifted.
5. All special programs for the gifted should be abolished.

Subscale 2 – Elitism.

6. Special programs for gifted children have the drawback of creating elitism.
7. Special educational services for the gifted children are a mark of privilege.
8. When the gifted are put in special classes, the other children feel devalued.
9. By separating students into gifted and other groups, we increase the labeling of children as strong-weak, good-less good, and so on.
10. The gifted are already favored in our schools.
11. Gifted children might become vain or egotistical if they are given special attention.

Subscale 3 – Acceleration.

12. Most gifted children who skip a grade have difficulties in their social adjustment to a group of older students
13. Children who skip a grade are usually pressured to do so by their parents.
14. When skipping a grade, gifted students miss important ideas. (They have holes in their knowledge).
15. A greater number of gifted children should be allowed to skip a grade. (Reverse scored)

Subscale 4 – Self-perceptions.

16. I was or could have been in a gifted program in school.

17. Most of my family and friends consider me gifted.

18. I am gifted.

19. Most of my family and friends are gifted.

20. People consider me gifted.

Legal, Ethical, and Moral Issues

Authorization to conduct this study was obtained from the Institutional Review Board for Human Subjects Research at Eastern Michigan University on May 25, 2012 before data collection began (See Appendix D). When addressing legal, ethical, and moral issues in survey research, the three most important areas are confidentiality, informed consent, and any legal requirements for data protection (Kelley, Clark, Brown, & Sitzia, 2003). These three areas were addressed in this study. Survey answers were compiled and confidentiality maintained using the password-protected SurveyMonkey® program for analysis with no identifiers.

Notice of confidentiality was included in the informed consent email letter. This letter adheres to Eastern Michigan University's "Eight Required Elements for Informed Consent" as can be found at <http://www.rcr.emich.edu>. Specifically:

1. Statement that study is research; information on purposes, duration, general procedures, and experimental procedures.
2. Reasonably foreseeable risks or discomforts
3. Benefits that may reasonably be expected
4. Alternative procedures
5. Process for maintaining confidentiality
6. For more than minimal risk, information on compensation for injuries

7. Contact names – at least one not associated with research recommended
8. Statement that participation is voluntary and the subject can withdraw at any time without penalty or loss of benefits to which the subject is otherwise entitled

Limitations

The findings of this study were limited by the following factors:

1. The study relied on the voluntary responses of a random sample of certified school psychologists from across Michigan. The results cannot be generalized to the universe of school psychologist working in the United States.
2. Although the composition of this study's sample is close to the composition of school psychologists in Michigan, more male respondents would have increased the opportunity to test differences in survey responses between males and females
3. Racially, the percentage of White survey respondents (94%) exceeded the state-wide percentage (89%) and the percentage of non-White survey respondents (6%) was lower than the state-wide percentage (11%).
4. Finally, of 125 respondents, only 20 (16%) reported that they worked with the gifted population. Having a greater number of respondents who worked with the gifted population may have been more representative of the universe of school of psychologists in Michigan and nationally.

Delimitations

The following were the delimitations relative to this study:

1. Data were only collected from state certified school psychologists in Michigan.
2. Only data from the 2012-2013 school year were used.

Validity and Reliability

External validity was achieved by selecting participants from across Michigan, a state whose registered school psychologists' demographics match closely the demographics of the NASP's national membership. In addition, follow-up emails were sent to the entire selection, and a 36% response rate was achieved.

Content validity was strengthened by having pretested the survey instrument using a pilot sample of school psychologists. The pilot group affirmed the clarity and understandability of the instructions and the survey questions.

Internal consistency on Part II of the survey was measured using Cronbach's alpha. This part of the survey consisted of a portion of the *Opinions about the Gifted and their Education* scale developed by Gagne and Nadeau (1991). The scale used for this study was adapted by McCoach and Siegle (2007) and is a 20-item instrument designed to measure four factors related to attitudes toward gifted students and gifted education using a 7-point Likert scale ranging from completely disagree to completely agree. The subscales measured Needs and Support, Elitism, Acceleration, and Self-perceptions. The following Cronbach's alpha reliability scores were found for each of these subscales: Support (alpha = .76), Elitism (alpha = .80), Acceleration (alpha = .71), and Self-perceptions (alpha = .94). Nunnally (1978) indicated that the higher the score, the higher the scale's reliability, and scores at 0.7 or higher are at an acceptable reliability coefficient.

Data Analysis

This study's survey results were analyzed using descriptive statistics, correlations, a multiple regression model, Spearman's rho, and ANOVA models using the software package IBM SPSS Statistics (SPSS), version 20 for Windows at a level of significance of 0.05.

Descriptive statistics consist of means, medians, and standard deviations of the sub-scales. Frequencies and graphs of variables were also developed. In addition, a Cronbach's alpha reliability test was completed on the responses to the *Opinions about the Gifted and Their Education* section of the online survey.

Coolidge (2000) provided the following guidance regarding multiple regression analysis:

In multiple regression, a single dependent variable (or criterion variable) is predicted from several independent variables (or predictor variables). The research is two-fold: to what extent can the independent variable predict the dependent variable, and what is the strength of each independent variable in the prediction of the dependent variable. Multiple regression would yield parameters that would describe the strength of the relationship between the criterion variable and the predictor variables and how much of the total variance could be accounted for by the predictor variables. The multiple regression equation would also yield weights that would reveal which was the strongest and weakest of the predictor variables in terms of their relationship to the criterion variable. (p. 266)

The four subscales in the survey's attitude section were the dependent (or criterion) variables, and responses were quantitative. The survey's descriptive sections provided the independent (or predictor) variables, and the data were ordinal, categorical, and quantitative. After means for the subscales were computed, separate multiple regression tests were completed for each of the four subscales of the attitude section. Model fitting was also completed to determine which of the independent variables should be included in the model. This entailed doing a step-wise regression. In this process,

Each independent variable is entered in sequence and its value assessed. If adding the variable contributes to the model then it is retained, but all other variables in the model are then re-tested to see if they are still contributing to the success of the model. If they no longer contribute significantly, they are removed. Thus, this method should ensure the smallest possible set of predictor variables were included in your model. (Brace, Kemp, & Snelgar, 2009, p. 210).

An ANOVA was then used when the independent variables were categorical, and a Spearman's rho method was used when at least one of the variables were ordinal. These methods assessed significant interactions between the independent and dependent variables and addressed the research questions.

Pilot Study Design and Results

A pilot study was conducted during spring of 2009. Thirteen participants were school psychologists from the 11 school districts in a Michigan Intermediate School District were all state-certified and members of NASP. Each was sent a link to both portions of the survey on the SurveyMonkey® website (www.surveymonkey.com). The psychologists were asked to complete both survey parts and to assess readability and understandability of the draft survey instrument.

Responses showed that the pilot group considered the wording of the instructions and survey questions to be clear and unambiguous. No changes to the draft survey were considered necessary based upon the pilot group's feedback, so no additional pretesting was conducted. This corroborates the belief that the pilot group provided a sound basis for evaluating the quality of the survey instrument.

Table 5 shows the demographic mix of pilot study subjects and a comparison of the demographics of study participants, school psychologists in Michigan in August, 2012, and a 2009-2010 survey of National Association of School Psychologists members.

Table 5

Comparison of Demographics of Pilot Respondents, Study Participants, Michigan School Psychologists, and Members of the National Association of School Psychologists.

Category	Mean			
	Pilot Study 1	Study Respondents	MI SP 2012	NASP
Age	43	42	-	47.4
Years in the Field	16	14	-	-
Gender		Percentage		
	Pilot Study N=13	Study Respondents N= 125	MI SP 2012 N=915	NASP N= 25,000+
Male	23	22	24	23
Female	77	78	76	77
Ethnicity				
White	92	94	89	90.7
Asian	8	-	1	1.3
African American	0	-	9	3
American Indian	0	-	<1	.6
Hispanic	0	-	1	3.4
Other	0	6	-	1
Highest Degree Obtained				
EdS/PhD/EdD	92	92	-	78
B.A. /Master's Degree	8	8	-	22

Summary

This chapter described the methods used to answer this study's research questions. These methods were used for identifying the universe; selecting the sample; pretesting the survey instrument; collecting the data; handling legal, ethical, and moral issues; limitations and delimitations, establishing validity and reliability; and analyzing the survey results.

CHAPTER IV: SUMMARY AND ANALYSIS OF DATA

The purpose of this study was to examine the relationship between personal experiences, professional experiences, and training of school psychologists and their attitudes toward the education of gifted students. Respondents' experiences, training, and attitudes were obtained via a two-part, on-line survey. All data were collected during the fall of 2012. Findings are for school psychologists in the state of Michigan.

As described in Chapter III, 125 valid survey responses were received. Two types of data were collected; Part I of the survey included descriptive data about the respondent's demographics, educational attainment, and work experience; Part II gathered attitudinal data about respondent's level of agreement or disagreement with statements pertaining to gifted children and their education. In this chapter, a summary of respondents' demographics is followed by the data gathered in Part II of the survey and an analysis of the findings related to each research question.

Summary of Demographic Data

Data reported in the 125 valid surveys showed females dominated the field; participants were generally White; and educational attainment was particularly high, with more than 90% reporting an EdS or PhD. Respondents' mean age was 42, with an age range from 25 to 72. Service as school psychologists ranged from under one year to 38 years, averaging about 12 years. Complete demographic data is shown in Table 2.

Attitude Survey–Cronbach's Alpha Reliability

Part II of the survey, the attitude scale developed by McCoach and Siegle (2007), is a 20-item instrument designed to measure four factors (subscales) related to attitudes toward gifted students and gifted education.

The first subscale measures *Needs and Support* and assesses the respondents' beliefs regarding the needs of gifted children and the respondents' level of support for special services for the gifted. A high score on this subscale indicates positive attitudes toward gifted students. This subscale contains five items; the original study by McCoach and Siegle (2007) had a Cronbach's alpha reliability of .76. The Cronbach's alpha reliability for this study was .438. Upon further investigation, question 5 had extreme wording ("All special programs for the gifted should be abolished."), which skewed the results. When it was removed from the analysis, the Cronbach's alpha reliability for this study increased to .689, much closer to McCoach and Siegle's original study.

The second subscale measures *Elitism*, which assesses the respondents' concerns about elitism and the favored status that gifted students may have in school and that gifted people may have within society in general. The higher the score on this subscale the more negative was the respondent attitude toward the gifted. This subscale contains six items; the original study by McCoach and Siegle (2007) had a Cronbach's alpha reliability of .80. The Cronbach's alpha reliability for this study was .80.

The third subscale measures *Acceleration*, which assesses the respondents' attitudes toward acceleration of academically gifted students in school. A high score on this subscale indicates a more negative attitude toward gifted students. This subscale contains five items; the original study by McCoach and Siegle (2007) had a Cronbach's alpha reliability of .71. The Cronbach's alpha reliability for this study was .731.

The fourth, subscale measures *Self-perceptions* and indicates whether the respondent perceives himself or herself as gifted. A high score on this subscale indicates a higher agreement with self-identifying as gifted. The subscale contains five items, and the original

study by McCoach and Siegle (2007) had a Cronbach's alpha reliability of .94. The Cronbach's Alpha reliability for this study was .932.

Correlations between the Subscales

Correlations were computed for the four subscales to determine the extent that one subscale predicted another. As shown in Table 6 the only subscales that showed a significant correlation were subscale 1 (*Support*) and subscale 2 (*Elitism*) with a correlation of $-.308$ ($p=.001$). This means that there was a weak negative correlation between these subscales. That is, if a school psychologist gives high scores in subscale 1, his or her scores in subscale 2 would be expected to be low. The other subscales were not significantly correlated.

Table 6

Correlations Between the Subscales

Subscale	Acceleration	Support	Elitism	Gifted Self-perceptions
Acceleration	1.000			
Support	-.202	1.000		
Elitism	.165	-.308**	1.000	
Gifted Self-perceptions	-.160	.054	-.091	1.000

**Correlation is significant at 0.01, two-tailed.

Noteworthy is that the correlations between the *Gifted Self-perceptions* subscale and the other subscales were not significant. This suggests that there is no evidence that school psychologists who self-identify as gifted are more or less likely to express positive attitudes toward gifted students and their education than school psychologists who do perceive themselves as gifted.

Means and standard deviations. All 20 items in the attitudinal survey were measured using a 7-point Likert scale, where 1 = completely disagree, 2 = disagree, 3 = slightly disagree, 4 = neither agree nor disagree, 5 = slightly agree, 6 = agree, and 7 = completely agree.

Because the mid-point of the scale is 4 (neither agree nor disagree), means above 4 show a tendency to agree with the statement, whereas means below 4 show a tendency to disagree. However, given the nature of the questions, agreeing or disagreeing does not necessarily translate to a positive or negative attitude toward the gifted or gifted education. The means and standard deviations for the subscales are shown in Table 7, followed by an interpretation of these results as they pertain to positive or negative attitudes.

Table 7

Means and Standard Deviations by Subscale

Subscale	Mean	Standard Deviation
Support	4.68	1.241
Elitism	3.05	1.124
Acceleration	4.19	1.083
Gifted Self-perceptions	3.75	1.482

Respondents were generally supportive of gifted students and gifted education. The mean of the *Support* subscale was 4.68 (the highest mean among the subscales), which indicated moderate support for gifted education. Respondents' attitudes about *Acceleration* were more mixed. The mean was 4.19, with a 1.083 standard deviation. Scores above 4 on this subscale indicate negative attitudes toward acceleration. Thus, respondents had a neutral or slightly negative view toward acceleration of gifted students. The mean of the *Elitism* subscale was 3.05, indicating that respondents tended to disagree with the notion that gifted

education is elitist. Finally, the mean of the *Gifted Self-perceptions* subscale was 3.75, close to the mid-point of the scale, with a standard deviation of 1.482, which suggested that opinions varied and no strong tendency was apparent.

Analyses Related to Specific Research Questions

Because the subscales were quantitative variables, a step-wise regression was performed to identify the relationships between the demographics (age, gender, ethnicity, years working as a school psychologist, and highest degree obtained broken into two variables; under EdS or not, and PhD or not, previous training, and previous experiences of respondents and their answers to the attitudinal survey questions. The only statistically significant demographic was *gender* on subscale 2 (*Elitism*) with a p-value of .017. Thus, when evaluating the research questions, gender will be investigated in relation to attitudes toward elitism. No other demographic findings showed a significant relationship with any of the subscales.

Research Question 1. What is the relationship between previous personal experiences, demographics, and attitudes toward gifted students and gifted education of school psychologists?

Null Hypothesis: There is no relationship between personal experiences, demographics, and attitudes toward gifted students and gifted education of school psychologists.

Responses to subscale 4 (*Gifted Self-perceptions*) provided a basis for evaluating whether respondents' previous personal experiences with giftedness in family, friends, or as perceived in themselves were related to any of the demographic variables. The data shown in Table 8 indicated that there was no significant difference in how respondents answered the

questions about their self-perception and personal experiences based on the demographic variables.

Table 8

Relationship of Gifted Self-perception and Demographic Variables

Variables	p Values
Age	.288
Gender	.670
Ethnicity	.180
Years of Service	.604
Below EdS	.976
PhD	.348

Research Question 2. What is the relationship between professional experiences, demographics, and attitudes toward gifted students and gifted education of school psychologists?

Null Hypothesis: There is no relationship between professional experience, demographics, and attitudes toward gifted students and gifted education of school psychologists.

Within the *descriptive data* portion of the survey, two crucial questions related to this research question: question 9 (*What types of programs does your district currently utilize for gifted students?*) and question 10 (*With what populations do you work?*). Noteworthy is that for question 10, every respondent reported that they work with special education students. This is not surprising because school psychologists are specifically trained and generally hired to work with this student population. Therefore, the analysis focused on whether the respondents reported that they worked with gifted students and regular education students. Of the 125 respondents, 20 reported that they also worked with gifted students and 103

reported that they also worked with regular education students. Each of the subscales was broken down and evaluated as shown in Tables 9 through 12.

Subscale 1 (Support for gifted education). Neither demographics, question 9 (type of programs offered in the school district) nor 10 (type of population with whom the school psychologist works) were significant for this subscale as shown in Table 9.

Table 9

Relationship of Subscale 1 (Support), Demographics of Respondents, and Survey Q. 9 & 10.

Variables	p Values
Age	.719
Gender	.495
Ethnicity	.301
Years working as a school psychologist	.190
Degree (below EdS or not)	.741
Degree (PhD or not)	.535
Question #9 (subject or grade acceleration)	.730
Question #9 (individualized education)	.399
Question #10 (regular education students)	.400
Question #10 (gifted students)	.953

Subscale 2 (Elitism). Working with regular education students and gender were significant when viewing elitism. Question 9 was not significant as shown in Table 10.

Table 10

Relationship of Subscale 2 (Elitism), Demographics of Respondents, and Survey Q. 9 & 10.

Variables	p Values
Age	.966
Gender	.008*
Ethnicity	.999
Years working as a school psychologist	.537
Degree (below EdS or not)	.809
Degree (PhD or not)	.784
Question #9 (subject or grade acceleration)	.547
Question #9 (individualized education)	.134
Question #10 (regular education students)	.042*
Question #10 (gifted students)	.056

Gender is significant ($p=.008$), this means that males more than females consider gifted education to be elitist. Question #10 is significant ($p=.042$), this means that school psychologists who work with regular education students tend to have a more negative view towards the gifted population than those who do not work with regular education students.

Subscale 3 (Acceleration). Table 11 shows no significance for demographics, question 9, or question 10 when testing the acceleration subscale.

Table 11

Relationship of Subscale 3 (Acceleration), Demographics of Respondents, and Survey Q. 9 & 10.

Variables	p Values
Age	.831
Gender	.771
Ethnicity	.536
Years working as a school psychologist	.950
Degree (below EdS or not)	.403
Degree (PhD or not)	.896
Question #9 (subject or grade acceleration)	.547
Question #9 (individualized education)	.134
Question #10 (regular education students)	.941
Question #10 (gifted students)	.413

Subscale 4 (*Gifted Self-perceptions*). Table 12 shows that working with regular education students was significant when looking at gifted self-perceptions; however, demographics nor question 9 was significant.

Table 12

Relationship of Subscale 4 (Gifted Self-perceptions), Demographics of Respondents, and Survey Q. 9 & 10.

Variables	p Values
Age	.076
Gender	.538
Ethnicity	.181
Years working as a school psychologist	.136
Degree (below EdS or not)	.641
Degree (PhD or not)	.586
Question #9 (subject or grade acceleration)	.412
Question #9 (individualized education)	.599
Question #10 (regular education students)	.023*
Question #10 (gifted students)	890

Question #10 is significant ($p=.023$), this means that school psychologists who work with regular education students show a greater likelihood of reporting themselves or those around them as gifted.

Research Question 3. What is the relationship between previous training, demographics, and attitudes toward gifted students and gifted education of school psychologists?

Null Hypothesis: There is no relationship between previous training, demographics, and attitudes toward gifted students and gifted education of school psychologists.

Within the *descriptive data* portion of the survey, the two crucial questions related to the third research question were question 11 (*How adequate was your training in special education while in graduate school?*) and question 12 (*How adequate was your training in gifted education while in graduate school?*). Each of the subscales was broken down and evaluated as shown in Tables 13 through 16. On subscale 1, training in special education in

graduate school was found to be significant ($p = .011^*$), but training in gifted education in graduate school was not ($p = .094$).

Table 13

Relationship of Subscale 1 (Support), Demographics of Respondents, and Survey Q. 11 & 12.

Variables	p Values
Age	.719
Gender	.495
Ethnicity	.301
Years working as a school psychologist	.190
Degree (below EdS or not)	.741
Degree (PhD or not)	.535
Question #11 <i>How adequate was your training in special education while in graduate school?</i>	.011*
Question # 12 <i>How adequate was your training in gifted education while in graduate school?</i>	.094

Question #11 is significant ($p=.011$), this means that school psychologists who feel that their training in special education was less than adequate, also tend to view gifted students more negatively.

On subscale 2 (*Elitism*), neither training in special education (Q. 11, $p=.549$), training in gifted education in graduate school (Q. 12, $p = .201$) nor demographics were significant.

Table 14

Relationship of Subscale 2 (Elitism), Demographics of Respondents, and Survey Q. 11 & 12.

Variables	p Values
Age	.719
Gender	.495
Ethnicity	.301
Years working as a school psychologist	.190
Degree (below EdS or not)	.741
Degree (PhD or not)	.535
Question #11 <i>How adequate was your training in special education while in graduate school?</i>	.549
Question # 12 <i>How adequate was your training in gifted education while in graduate school?</i>	.201

Subscale 3 (*Acceleration*), as shown in Table 15, neither question 11 ($p = .944$), question 12 ($p = .249$) nor demographics were significant for this subscale.

Table 15

Relationship of Subscale 3 (Acceleration), Demographics of Respondents, and Survey Q. 11 & 12.

Variables	p Values
Age	.719
Gender	.495
Ethnicity	.301
Years working as a school psychologist	.190
Degree (below EdS or not)	.741
Degree (PhD or not)	.535
Question #11 <i>How adequate was your training in special education while in graduate school?</i>	.944
Question # 12 <i>How adequate was your training in gifted education while in graduate school?</i>	.249

Subscale 4 (*Gifted Self-perceptions*), as shown in Table 16, although training in special education was not significant ($p=.452$), training in gifted education in graduate school was significant ($p=.002^*$).

Table 16

Relationship of subscale 4 (Gifted Self-perceptions), Demographics of Respondents, and Survey Q. 11 & 12.

Variables	p Values
Age	.719
Gender	.495
Ethnicity	.301
Years working as a school psychologist	.190
Degree (below EdS or not)	.741
Degree (PhD or not)	.535
Question #11 <i>How adequate was your training in special education while in graduate school?</i>	.452
Question # 12 <i>How adequate was your training in gifted education while in graduate school?</i>	.002*

Question #12 was significant ($p=.002$), this means that school psychologists who report themselves or those close to them as gifted are also likely to have had more training in gifted education while in graduate school.

Analysis of Variance (ANOVA) and Spearman's rho analyses were performed to assess the differences between each subscale and the variables from questions 9, 10, 11, and 12.

Subscale 1 (*Support*): Only question 11 was significant (*How adequate was your training in special education while in graduate school?*). A Spearman's rho procedure was

used because the responses were ordinal. The higher the value on question 11 (e.g. *less than adequate* or *very inadequate*), then answers on subscale 1 tend to go down. That is, school psychologists who feel that their training in special education was less than adequate tend to view gifted students more negatively. The relationship was significant but very weak ($r = -.271, p = .003$).

Subscale 2 (*Elitism*): Gender ($p = .010$) and whether the school psychologist worked with the regular education population ($p = .043$) accounted for the difference in the scores; school psychologists answer the subscale differently based on those two factors. An ANOVA was used because the variables were categorical. Females had lower mean scores (2.9309) on subscale 2 (elitism) than did males (3.4753). Respondents who were not working with regular education students had a mean of 2.7. For those who were working with regular education students, the mean was 3.12. These findings indicate that school psychologists who work with regular education students have a higher average on elitism (subscale 2) than those who do not.

Subscale 3 (*Acceleration*): None of this subscale's variables were significant.

Subscale 4 (*Gifted Self-perceptions*): Question 10 was significant (*With what populations do you work?*). An ANOVA was used because the dependent variable was quantitative, whereas question 10 is categorical. A significant difference was suggested by this analysis, meaning that school psychologists who reported working with the regular education population show a higher mean on subscale 4, indicating their likelihood to report themselves or those around them as being gifted ($p = .028$).

Question 12 was also significant with this subscale (*How adequate was your training in gifted education while in graduate school?*). A Spearman's rho procedure was used

because the responses to question 12 were ordinal. This analysis showed a trend with a weak negative association ($r = -.304, p = .001$). Lower scores on subscale 4 are correlated with having less training with in gifted education. In other words, school psychologists who do not report themselves or those close to them as gifted tend to also report having less training in gifted education while in graduate school.

Summary

The results and analysis of the data gathered in this study was presented in this chapter. In general, school psychologists in Michigan are supportive of gifted students and gifted education, they hold neutral or slightly negative attitudes toward accelerating gifted students, and they tend to disagree with the notion that gifted education is elitist.

Demographic analysis showed that gender played a significant role in how school psychologists answer questions related to elitism. Men tend to have a more negative view of the gifted population than do women. No significant differences were found to result from the other demographic variables of age, ethnicity, years working as a school psychologist, and educational attainment.

In terms of personal experience, school psychologists who self-identify as not being gifted or having close association with someone gifted tend to have less training in gifted education while in graduate school. In a related finding, those who report working with regular education students show a greater likelihood of reporting themselves or those around them as gifted. However, those who work with regular education students tend to have a more negative attitude toward gifted students than those who do not work with regular education students. In terms of previous training, school psychologists who consider their

training in special education to be less than adequate tend to view gifted students more negatively.

CHAPTER V

Conclusions and Recommendations

This chapter includes this study's findings, conclusions, implications, and recommendations for further research. Underpinning this study is the sense that it is important to identify gifted children and provide programming for them in ways that best suit their needs. This is no easy task. The answer is highly complex and would benefit from the knowledge and expertise of professionals who understand research-based assessment, educational programming for special populations, and psychology to address the socio-emotional needs of the gifted (NASP, 2010).

No professional in the school system fits these criteria better than a school psychologist. However, Wiener's 1968 study of various professionals' attitudes assessed 252 school psychologists, 52 psychometrists, and 102 others in allied fields, and found that school psychologists were the least favorably inclined toward gifted students and their programming. Determining whether these findings are still true is a challenge for the present study.

Therefore, this study explored the relationships between professional experiences, personal experiences, and previous training and the attitudes of school psychologists in Michigan toward gifted students and gifted education. Further, the study sought to determine if any of these factors, including demographics, played a significant role in how school psychologists felt about gifted students and the programs for them. Reasonable assumptions could then be made about whether the attitudes of school psychologists affect subsequent behaviors.

Respondents to this study were generally supportive of gifted students and their education, although they held a neutral or slightly negative view of accelerating gifted students. Males tend to have a more negative opinion of gifted education, considering it to be elitist more so than do the women. Other demographic factors, including age, ethnicity, years of working as a school psychologist, and education did not show any significance in relation to attitudes within this sample of school psychologists. That is not to say that there are no differences in attitude among people of different backgrounds, only that no evidence of those differences was found in this study.

Olson, Vernon, Harris, & Jang (2001) found that highly heritable personality traits or abilities tend to predispose people to form certain attitudes. Thus, people who perceive themselves to be gifted will likely have a more positive attitude toward gifted children and gifted education. In the present study, evaluation of personal experience with gifted students revealed that school psychologists who reported themselves or those close to them as gifted were also likely to have more training in gifted education while in graduate school. School psychologists who perceived themselves as gifted may have sought out classes, conferences, and further training in the area of gifted education because of their more positive attitudes stemming from their personal experiences with giftedness.

In a related finding, school psychologists who report working with regular education students show a greater likelihood of reporting themselves or those around them as gifted. Perhaps school psychologists who view themselves or someone close to them as gifted feel a strong desire to help determine if any regular education students are gifted or have needs that are being overlooked. This is an important distinction because school psychologists tend to spend a great majority of their time with children who are disabled. However, this study

showed that school psychologists who work with regular education students tend to have a more negative view towards the gifted population than school psychologists who do not work with regular education students. This may be an example of the *cognitive dissonance theory* (Festinger, 1957), which is demonstrated when people behave in ways that contradict their attitudes, and ultimately change their attitudes or behaviors in order to ease tensions between the inconsistencies. Having personal experiences with giftedness, yet holding a more negative opinion of the gifted, may cause some school psychologists to change their behavior to one of helping in order to ease the tension between their attitude and their behavior.

Studies reported that attitudes can be formed about a person or object after gaining information about it. This information can come from direct experience, such as spending time working with gifted children or indirect experience, taking classes or attending conferences on gifted children/programming (Fazio & Zanna, 1978). Consequently, it would seem beneficial to offer more training related to gifted students and their education to *all* graduate students of school psychology, whether or not they consider themselves to be gifted.

Bornstein (1989) discussed the *mere exposure effect*, in which repeated exposure to a person or object, increased liking of the person or object. Thus, it would seem logical that increased training and positive direct experience with the gifted would tend to improve attitudes toward them. Based on findings in the literature, educational leaders responsible for graduate school curriculum for school psychology students should encourage more coursework and work experiences in gifted student identification and programming. Further, it would also seem wise for supervisors of local school psychologists to encourage more conferences and continuing education classes dealing with giftedness.

In addition to increasing training, supervisors and directors may also wish to seek authorization to expand work time for school psychologists so they can play a more direct role in identifying and working with gifted students. Only 20% of respondents reported having any involvement with the gifted, and none are devoting full-time to this work. It is unclear from the results of this study how much time these 20% are able to provide. Why this is so, and what might be done to improve this situation would be a strong candidate for further study?

Finally, school psychologists who feel that their training in special education was less than adequate, tend to also view gifted students more negatively. *Attitude strength* is a factor that comes into play when considering the relationship between previous training and attitudes. Research has shown that attitudes become stronger as information about the subject of the attitude increases (Fazi & Zanna, 1978). Perhaps this negative attitude toward gifted students and gifted education stems from a lack of knowledge and training on the subject. One might surmise that if a school psychologist's special education training in graduate school was less than adequate (the foundation of our profession), their graduate training would be less than adequate as well.

The *theory of planned behavior* was developed by Ajzen and Fishbein in 1980 to predict human behavior based on attitude (Ajzen, 1991). The researchers found that intention was the best predictor of behavior, and that a person's intention was the cognitive representation of a person's readiness to perform a certain action. Such intentions were influenced by one's attitude toward the behavior, normative beliefs (expectations of others), and perceived control (the presence of factors that may facilitate or impede performance of the behavior (Goldsmith, 2000). Regarding this study's research questions, it could be

inferred from the theory of planned behavior that a school psychologist with a favorable attitude toward gifted students, in a district where support for all students was strong, and perceived control over the psychologist's duties was high, would likely seek to assess and program gifted students. The results of this study suggests that school psychologists who received more training in gifted education and worked with the regular education students (from which the gifted population originates) on a regular basis, tend to also have personal experiences with the gifted population. Conversely, less training is associated with more negative opinions of gifted students.

The findings in this study suggested that positive attitudes with regard to the gifted and thus, behavior leading toward increased interest in working with *all* children with special needs, be they disabled or gifted, would improve if more graduate school training about giftedness and one-on-one experiences with gifted students was available. Acting upon changes suggested in the literature and the findings of this study, school leaders could improve the attitudes of school psychologists and better ensure that gifted students are properly identified and engaged in programming well suited to their needs. In turn, these changes would benefit this often-underserved special population that has unlimited potential to serve this nation and mankind.

Recommendations for Further Research

Demographic factors, including age, ethnicity, years of working as a school psychologist, and level of educational attainment did not show any significance in relation to attitudes among school psychologists in this study. Future research in this area should strive to include a more varied demographic mix, perhaps through the use of a stratified sample. In terms of ethnicity, the findings do not suggest that there are no differences in attitude among

people of different backgrounds, only that no evidence of those differences was found in this study. Perhaps significant differences would be found in another study with more equal numbers of men and women, or with a more ethnically diverse sample.

Extending the geographic scope of a future study may show that findings vary significantly by state or region of the U.S. A broader study that includes teachers, principals and school board members might find interesting differences among their attitudes toward identifying or programming for gifted students compared to those of school psychologists.

Assessing the attitudes of other professionals in addition to school psychologists who deal with special needs students might also be useful. A study of educational leaders within the field would be useful. It would seem beneficial to assess the attitudes towards gifted education of the professors who develop graduate school psychology programs. It would also be helpful to look at attitudes held by special education supervisors and special education directors who often direct and oversee the work of school psychologists within their districts.

Only 20 of 125 respondents (16 %) in this study reported having a role in the identification of or programming for gifted students, and none are serving the gifted students full-time. If this apparent and startlingly low involvement of school psychologists in the identification of the gifted and programming for them is a true reflection of the situation nationally, this study is a wake-up call for the profession. Given the knowledge, skills, and abilities typically attributed to school psychologists, it seems they are being underutilized to the detriment of one of our nation's most precious assets. Determining whether the low rate of school psychologists involved in gifted programs in Michigan represents a national phenomenon should be a research priority.

Presuming that school psychologists' utilization in gifted education is less than the profession deems optimal exploring the possible reasons for this underutilization, and what might be done to improve the situation, would be fertile domain for further study. Answers to the following research questions might reveal avenues for increasing the contribution of school psychologists to the attainment of the important national goal of ensuring that gifted students reach their full potential to benefit our nation and the world.

1. Why are school psychologists not being more engaged in gifted students' education?

What models are being used for providing gifted programming, and what roles do school psychologist playing in each?

Who decides which model to use and which professions will be involved?

What considerations drive their decisions?

What are the priority uses for the skills of school psychologist?

Do school psychologists desire to play a significant role in gifted student education? If not, why? If so, what factors prevent or inhibit them from doing so?

2. What employability issues contribute to the underutilization of school psychologists in gifted student education?

How much, if at all, do those who make hiring decisions require or consider coursework or experience related to gifted education when hiring school psychologists

Do those who hire school psychologist perceive them to be adequately prepared to work with gifted students? If not, what is lacking?

3. How might graduate schools better prepare their students to contribute to gifted student education?

What required or elective courses related to gifted education are available in the curriculum for school psychologists?

Are internships involving the gifted available for graduate students in school psychology programs?

Is enrollment of school psychologists in graduate courses in special education or gifted education low? If so, why?

4. To the extent that psychologist are being underutilized due to misperceptions or lack of awareness of their potential contributions, what role might national associations such as NASP play in the education process?

Summary

Finding ways to better meet the special needs of gifted students is complex. This study added to the knowledge base regarding attitudes held by Michigan school psychologists. The results will likely help to focus further research in the areas of attitudes toward gifted education and subsequent behavior by other populations of professionals or school psychologists. The more that is known about how attitudes are affecting behavior, the better able school leaders will be to change attitudes from negative or indifferent to positive; and thereby improve the likelihood that gifted students get the special attention they and the nation deserve.

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APPENDICES

Appendix A – Instrumentation

(Part I – Descriptive Data)

Thank you for participating in the following survey on gifted students and their education. Part I of the survey consists of demographic data as well as some questions pertaining to experience and training. Part II of the survey consists of questions pertaining to attitudes toward gifted students and gifted education. This survey is anonymous and should be answered as truthfully as possible.

For the purpose of this research project, the following definition will be used to conceptualize gifted students: **Although there is no universally accepted definition of giftedness, it is generally the case that gifted students are described as those who have demonstrated a high achievement in intellectual, creative, artistic, leadership capacity, and/or specific academic fields (Black, 2006).**

1. What is your gender?
 Male Female
2. What is your age? _____
3. In what state do you reside? _____
4. What is your ethnicity?
 White African-American, Non-Hispanic
 Native-American Asian, Pacific Islander
 Latino, Hispanic Other _____
5. Please mark the highest degree you possess?
 Bachelor's Degree (B.A., B.S., B.Ed.)
 Master's Degree (M.A., M.S., M.Ed., M.S.W., etc.)
 Advanced Degree (Ed.S., etc.)
 Ph.D. or Ed.D.
6. How many years have you been working as a school psychologist? _____
7. Where is your primary place of employment?
 College/University
 Mental Health Agency
 Private Practice
 Private School
 Public School
 Other _____
8. What is your NASP membership type?

- Regular Member
- Retired Member
- Student Member
- Transition Member

9. What types of programs does your district currently utilize for gifted students?
(Check all that apply)

- Special classes for the gifted in one or more major subject areas
 - Subject or grade acceleration for gifted/academically advanced students
 - Pull-out programs for gifted students
 - School-wide enrichment model program
 - Individual educational plans (IEP's) for gifted/twice exceptional students
 - Team teaching with teacher of the gifted
 - Differentiation of instruction within general education
 - Nothing
 - Other
-

10. With what populations do you work? (Check all that apply)

- Special education students
- Gifted students
- Regular education students

11. How adequate was your training in special education while in graduate school?

- Very adequate
- Somewhat adequate
- Less than adequate
- Very inadequate

12. How adequate was your training in gifted education while in graduate school?

- Very adequate
- Somewhat adequate
- Less than adequate
- Very inadequate

13. How confident are you that your school that you work for does all it can to help the following groups of students succeed? (Please rate each area on the following scale):

	Very confident	Somewhat confident	Not very confident	Not at all confident
Gifted students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Special ed students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regular education students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Please rate your confidence in the ability of the following people to help gifted students succeed? (Please rate both areas on the following scale)

- Very
- Somewhat
- Not Very
- Not at all

	confident	confident	unconfident	unconfident
You	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other School Psychologists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Part II – Attitude Survey Data) Opinions about the Gifted and Their Education

Francoys Gagne & Lorraine Nadeau (1991) Version adapted by McCoach and Siegle (2007)

Instructions: The following statements concern attitudes about gifted children and their education. They were taken from newspaper articles, books, and other sources. I would like to know the extent of your agreement or disagreement with each of them. There are no correct or incorrect answers.

Part I: Please rate how strongly you agree or disagree with the following statements. In answering each question, use a range from (1) to (7) where (1) stands for **strongly disagree** and (7) stands for **strongly agree**. Please circle only one response choice per question. Please answer as spontaneously as possible.

STATEMENT 1 2 3 4 5 6 7

1. Our schools should offer special education services for the gifted.

1 2 3 4 5 6 7

2. The gifted need special attention to fully develop their talents.

1 2 3 4 5 6 7

3. Tax payers should not have to pay for special education for the minority of children who are gifted.

1 2 3 4 5 6 7

4. Since we invest supplementary funds for children with difficulties, we should do the same for the gifted.

1 2 3 4 5 6 7

5. All special programs for the gifted should be abolished.

1 2 3 4 5 6 7

6. Special programs for gifted children have the drawback of creating elitism.

1 2 3 4 5 6 7

7. Special education services for gifted children are a mark of privilege.

1 2 3 4 5 6 7

8. When the gifted are put in special classes, the other children feel devalued.

1 2 3 4 5 6 7

9. By separating students into gifted and other groups, we increase the labeling of children as strong-weak, good-less good, etc.

1 2 3 4 5 6 7

10. The gifted are already favored in our schools.

1 2 3 4 5 6 7

11. Gifted children might become vain or egotistical if they are given special attention.

1 2 3 4 5 6 7

12. Most gifted children who skip a grade have difficulties in their social adjustment to a group of older students.

1 2 3 4 5 6 7

13. Children who skip a grade are usually pressured to do so by their parents.

1 2 3 4 5 6 7

14. When skipping a grade, gifted students miss important ideas. (They have holes in their knowledge.)

1 2 3 4 5 6 7

15. A greater number of gifted children should be allowed to skip a grade.

1 2 3 4 5 6 7

16. I was or could have been in a gifted program in school.

1 2 3 4 5 6 7

17. Most of my family and friends consider me gifted.

1 2 3 4 5 6 7

18. I am gifted.

1 2 3 4 5 6 7

19. Most of my family and friends are gifted.

1 2 3 4 5 6 7

20. People consider me gifted.

1 2 3 4 5 6 7

Appendix B: Informed Consent E-Mail

Dear School Psychologist,

You have been selected as a member of a random sample of school psychologists to participate in a survey of school psychologists' personal/professional experiences, training, and attitudes toward gifted children and their education. This is a dissertation research study conducted by Angela Spaniolo-DePouw MA, SPsy, a doctoral student at Eastern Michigan University/Grand Valley State University, under the supervision of Dr. Ron Williamson, Ed.D.

The purpose of the study is to collect information regarding school psychologists' experiences and training with gifted children. Your name was generated from the membership database of certified school psychologists in the state of Michigan. About 500 other school psychologists are also being asked to participate in this study. If you decide to participate, you are asked to complete the online survey at the following link:

<https://www.surveymonkey.com/s/SK7RFLI>

Survey completion time is estimated to be about ten to fifteen minutes. Confidentiality will be maintained, and your responses will be combined with others and summarized in statistical analysis. Information you share will not be reported in any way that would identify you personally and you will, therefore, be anonymous. If you would like a summary of the results, you are invited to request one.

The information gained from this research may offer valuable information regarding identification and programming of gifted students. Ultimately, quality of services provided

by school psychologists to children and families may be improved. There do not appear to be any foreseeable risks to participants in this study.

Participation in this study is voluntary. Refusal to participate in this research study, or withdrawal of participation, will involve no penalty or loss of benefits to which you are otherwise entitled. This research protocol and informed consent document has been reviewed and approved by the Eastern Michigan University Human Subjects Review Committee for use from 5/24/12 to 5/24/13 . If you have questions about the approval process, please contact Dr. Deb de Laski-Smith (734-487-0042, Interim Dean of the Graduate School and Administrative Co-chair of UHSRC, human.subjects@emich.edu). By participating in this survey, you are attesting that you have read these issues of informed consent and agree to participate in this research study.

Please contact me to answer any questions you may have regarding this research project. I can be reached at the email address, phone number, and/or mailing address below. Your time and involvement in this study is much appreciated.

Sincerely,

Angela Spaniolo-DePouw, M.A., SPsy
School Psychologist
71 Hughey St.
N. Muskegon, MI 49445
Phone: 231-744-6697
Email: sdepouw@aol.com

Dr. Ron Williamson, Dissertation Chair
Eastern Michigan University
College of Leadership and Counseling
304 Porter Rd.
Ypsilanti, MI 48197
(734) 487-7120 ext. 2685
rwilliams1@emich.edu

Appendix C: Follow-Up Email

If you have already participated in this research study, please disregard this message, and I want to sincerely thank you for doing so. If you have not yet participated, please consider completing the quick survey below in order to add your input into this dissertation research study. Thank you so much, in advance, for your help...it is so appreciated.

Dear School Psychologist,

You have been selected as a member of a random sample of school psychologists to participate in a survey of school psychologists' personal/professional experiences, training, and attitudes toward gifted children and their education. This is a dissertation research study conducted by Angela Spaniolo-DePouw MA, SPsy, a doctoral student at Eastern Michigan University/Grand Valley State University, under the supervision of Dr. Ron Williamson, Ed.D.

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Survey completion time is estimated to be about ten to fifteen minutes. Confidentiality will be maintained, and your responses will be combined with others and summarized in statistical analysis. Information you share will not be reported in any way that would identify

you personally and you will, therefore, be anonymous. If you would like a summary of the results, you are invited to request one.

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Participation in this study is voluntary. Refusal to participate in this research study, or withdrawal of participation, will involve no penalty or loss of benefits to which you are otherwise entitled. This research protocol and informed consent document has been reviewed and approved by the Eastern Michigan University Human Subjects Review Committee for use from 5/24/12 to 5/24/13 . If you have questions about the approval process, please contact Dr. Deb de Laski-Smith (734-487-0042, Interim Dean of the Graduate School and Administrative Co-chair of UHSRC, human.subjects@emich.edu). By participating in this survey, you are attesting that you have read these issues of informed consent and agree to participate in this research study. Please contact me to answer any questions you may have regarding this research project. I can be reached at the email address, phone number, and/or mailing address below. Your time and involvement in this study is much appreciated.Sincerely,

Angela Spaniolo-DePouw, M.A., SPsy
ChairSchool Psychologist

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Appendix D: University Human Subjects Review Committee Approval Letter

EASTERN MICHIGAN UNIVERSITY

Education First

May 25, 2012

UHSRC INITIAL APPROVAL

To: Angela Spaniolo-DePouw Leadership and Counseling
Re: UHSRC #120506 Category: EXEMPT #2

Approval Date: May 24, 2012

Title: An Examination of the Relationship Between Personal/Professional Experiences and Training of School Psychologists and Their Attitudes Toward the Education of Gifted Students

The Eastern Michigan University Human Subjects Review Committee (UHSRC) has completed their review of your project. I am pleased to advise you that **your research has been deemed as exempt** in accordance with federal regulations. The UHSRC has found that your research project meets the criteria for exempt status and the criteria for the protection of human subjects in exempt research. **Under our exempt policy the Principal Investigator assumes the responsibility for the protection of human subjects** in this project as outlined in the assurance letter and exempt educational material.

Renewals: Exempt protocols do not need to be renewed. If the project is completed, please submit the **Human Subjects Study Completion Form** (found on the UHSRC website). **Revisions:** Exempt protocols do not require revisions.

However, if changes are made to a protocol that may no longer meet the exempt criteria, a **Human Subjects Minor Modification Form** or new **Human Subjects Approval Request Form** (if major changes) will be required (see UHSRC website for forms). **Problems:** If issues should arise during the conduct of the research, such as unanticipated problems, adverse events, or any problem that may increase the risk to human subjects and change the category of review, notify the UHSRC office within 24 hours. Any complaints from participants regarding the risk and benefits of the project must be reported to the UHSRC. **Follow-up:** If your exempt project is not completed and closed after three years, the UHSRC office will contact you regarding the status of the project and to verify that no changes have occurred that may affect exempt status. Please use the UHSRC number listed above on any forms submitted that relate to this project, or on any correspondence with the UHSRC office.

Good luck in your research. If we can be of further assistance, please contact us at 734-487-0042 or via e-mail at human.subjects@emich.edu. Thank you for your cooperation.

Sincerely,

Deb de Laski-Smith, Ph.D.
Interim Dean
Graduate School
Administrative Co-Chair University Human Subjects Review Committee
University Human Subjects Review Committee @ Eastern Michigan University @ 200 Boone Hall

Ypsilanti, Michigan 48197
Phone: 734.487.0042 Fax: 734.487.0050
E-mail: human.subjects@emich.edu
www.ord.emich.edu (see Federal Compliance)

The EMU UHSRC complies with the Title 45 Code of Federal Regulations part 46 (45 CFR 46) under FWA00000050. UHSRC