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Examining Aspects of Role and Practice Changes for School Psychologists in Georgia: A Mixed Methods Analysis

Bruce A. Rogers

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EXAMINING ASPECTS OF ROLE AND PRACTICE CHANGES FOR SCHOOL
PSYCHOLOGISTS IN GEORGIA: A MIXED METHODS ANALYSIS

by

Bruce A. Rogers

(Under the Direction of Cordelia Zinskie)

ABSTRACT

Throughout the 1980's and onward, professional commentary, editorials and models have been put forward to expand roles for school psychologists beyond assessment and special education. The harbinger has been to move away from traditional roles towards including all students in prevention, mental health and regular education initiatives. Recent legislation passed including NCLB, 2001 and IDEA, 2004 for schools across the country represented a major change for the directions of public school curriculum to include scientific based research instruction, more accountability and increased assessment at each grade level. This study was conducted in light of the historical context, these recent legislative changes and changes within Georgia's curriculum structure with standards based instruction and the implementation of the pyramid of interventions.

The research conducted investigated changes in the roles and practice of school psychologists in Georgia and the perceptions of changes in the field using mixed methods inquiry through survey and interview data collected. Participants in the survey included 444 school psychologists from the membership of the Georgia Association of School Psychologists. There were also 15 interview volunteers from small, medium and large school systems included in the research. The survey data collected were compared with the results of Kimball's (1998) study to examine any changes in the roles and practices of school psychologists in Georgia over

the last 12 years. While a rank order comparison of role involvement reflected similar findings to Kimball's research, there were implications of role change with statistically significant differences obtained in four of the five role areas measured. Additionally, reported percentages of involvement also noted changes in the roles for school psychologists in Georgia. Interview information helped contextualize the degree of changes in roles and the difficulties encountered in the transformative process. Results noted agreement on the decrease in assessment for school psychologists in the field, feelings of uncertainty for the role changes and perceptions that RtI was helping students in the regular education setting. Barriers and empowerments to change for school psychologists were also reported.

INDEX WORDS:School psychologist, School psychologists, Georgia, Roles, Role changes, Interventions, Mixed methods, Learning disability, IDEA, NCLB, History, Assessment, RtI, Consultation, Program planning, Evaluation, Direct service, Research, Interviews

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PSYCHOLOGISTS IN GEORGIA: A MIXED METHODS ANALYSIS

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Chapter I

INTRODUCTION

The field of school psychology came into existence shortly after the turn of the century. It was a loose collection of semi-related fields all focused on helping those in the education system including the administrator, frustrated teacher and struggling student. Born primarily from within the emerging new field of psychology, school psychologists were an eclectic mix of professionals determined to find solutions to ongoing educational problems including learning, behavior, social and mental issues of the day (Fagan, 1990).

Very early in the history of school psychology, the assessment role and students with special needs became inextricably linked with school psychological practice (Fagan, 1990). Early experimental practitioners like Alfred Binet, H.H. Goddard and E.L. Thorndike contributed to solidifying assessment as the dominant role for the field of school psychology. Assessment in the early 1900's moved from spectacle to accepted practice within a span of about two decades, and by the 1920's, IQ assessment was an accepted practice by the majority as legitimate and useful to the school system (Zenderland, 2001). However, IQ research also contributed to controversial aspects of society including racial stereotypes and eugenics theory (Barkan, 1992; Lewontin, Rose & Kamin, 1984).

The early practitioner's assessment role was in the form of individual IQ testing using the Binet Scales named after the creator Alfred Binet (Anastasi, 1988). However, these individuals also had a variety of other roles in the schools which were often dictated by the particular school system or agency served (Gilmore & Chandy, 1973). Attempts to define school psychologists and their roles and practice in the schools began as early as 1930 with what Fagan and Wise (1994) noted as the first text book published on school psychology by Gertrude Hildreth. Later

the American Psychological Association (APA) created a representative division for School Psychology in 1946 to help guide the field on a more national level. The Thayer Conference of 1954, an initial national gathering, was held to further clarify school psychologist roles, training and practice (Cutts, 1955). Although school psychologists had been conducting assessments since the early 1900's, it was this conference which affirmed the role of assessment as the desired primary role for school psychologists. Nevertheless, areas of service as late as the 1960's included multiple functions within the schools, so much so, that Fagan (1990) termed the period as being "noteworthy of role confusion..." (p. 919). This role confusion may have been due in part due to lack of training programs and continuity within them (Fagan, 1995).

These formative years for the field of school psychology Fagan (1990) termed the "hybrid years," for it was an aggregated mixture of many professionals who were all focused on aiding education from a psychological frame of reference and yet lacked a field uniformity in education, training and practice. The 1970's onward, termed by Fagan as the "thoroughbred years," reflected a large increase in university training programs across the country, as well as more consistency in the type of training and practice by the field. It was around this time that the National Association of School Psychologists (NASP) was formed and provided clearer guidance from a national body encompassing those specific to the field rather than a subgroup within a larger group like the APA (Fagan, 1990).

When federal legislation for the omnibus special education bill, Public Law 94-142, named the Education for All Handicapped Children Act, was passed in 1975, school psychologists at that time were growing exponentially around the nation and in Georgia. Fagan (1995) reported that school psychologists nationally had grown from around 1000 in 1950 to over 8,000 by 1975, and McAfee (1988) reported that the state of Georgia had grown from 10 in

1960 to 540 in 1986. Meacham and Peckham (1978) reported that there were 180 school psychologists in Georgia in 1975-1976. This federal legislation impacted not only the growth of the field numerically but also solidified role specificity within the field of school psychology to a primary role of assessment (Hosp & Reschly, 2002). Kimball (1998) noted that Georgia's school psychologists followed national patterns with regards to the predominance of assessment roles.

Criticisms of Public Law 94-142 and of the reified roles for school psychologists began as quickly as the law that had been passed (Reschly, 1988). Office of Civil Rights (OCR) complaints and lawsuits were formed shortly after the law had been implemented on behalf of minority populations being over-represented in special education settings (Reschly, Kicklighter & McKee, 1988). The outcomes of legal decisions of the courts and professional dialogue of those in the field questioned the usefulness of IQ assessment and the validity of its use as an instrument to help with placement of minority populations in special education.

Trachtman (1981) and Reschly (1988) warned of reification for the field in the test-and-place roles for school psychology. Kliebard (2004), Pinar (2004) and Purpel (2005) warned of nationalistic agendas and positivist education. Refinements of the profession and practice in the field came through nationalized training and practice recommendations by NASP and the APA (French, 1992; Ysseldyke, Reynolds & Weinberg, 1984). The special education law refinements began with reauthorizations of subsequent versions and nomenclatures of Public Law 94-142 (Lowry, 1998).

Georgia has adopted and adapted several strategies and procedures in the education system to amend disproportional over-representation for minority students in special education. The first systemic procedure to ensure due process was the development of the Student Support Team (SST) as agreed by the State of Georgia with the legal decisions made from *Marshall*

versus Georgia in 1984 (Reschly et al., 1988; Smith, 1998). Georgia's most recent strategies involve SST within the tiers of intervention and progress assessment using a response-to-intervention (RtI) model. As suggested by Gilmore and Chandy (1973), the role aspects for school psychologists practicing in role and function are systemically embedded in these strategies and processes within the school systems across Georgia.

McAfee (1988) and Kimball (1998) investigated aspects of these reported roles of school psychologists within Georgia in the latter 1980's and 1990's. McAfee's study examined the agreement between raters and level of involvement for school psychologists along 10 dimensions of service for school psychologists from the perspectives of the school psychologist and other school leaders including the principal, special education administrator, instructional specialist and the school counselor. Her conclusions of the agreed roles as reported by each group were in congruence with several of what NASP later suggested as the 5 broad role areas including assessment, direct services, consultation, program planning and implementation and research (National Association of School Psychologists [NASP], 1992).

Kimball (1998) examined current versus desired roles for school psychologists practicing as seen by school psychologists and principals in the state. His study focused on the NASP defined broad areas of service including assessment, consultation, program planning and implementation, research and direct services. He surveyed the actual versus desired roles from the perspectives of these two types of respondents. Kimball's study suggested that assessment was still a primary role for school psychologists around Georgia in the late 1990's.

A similar statewide survey of school psychologists was conducted by Lowry (1998) investigating a ten year follow-up of the school psychologists practicing in Virginia using survey data to compare her results with two earlier research studies spanning two decades. This inquiry

examined role aspects, psychologist training and other professional attributes and functions in that state as an outgrowth from Public Law 94-142. Her results suggested an increase in the amount of education as desirable and a movement away from the assessment role towards more direct services roles for those practicing in Virginia.

Throughout the latter 1980's forward, professional commentary and research on school psychologists' future roles has included encouraging expanding beyond assessment and special education. Many voices including Reschly (1988, 2000), Will (1988), Ysseldyke et al. (1984, 1997, 2006), Conoley and Gutkin (1995), Bradley-Johnson, Johnson and Jacob-Trimmm (1995), Reschly and Wilson (1995), Sheridan and Gutkin (2000), Curtis, Grier and Hunley (2004), Sheridan and D'Amato (2004), Fuchs and Vaughn (2006), Cantor (2006), and Fletcher-Janzen (2007) as well as others have advocated for a changing picture of school psychologists' roles and services within the schools. NASP and APA supported the development of certification standards and also defined service roles in the schools. Additionally, NASP supported the development of school psychologist service models for school systems across the nation with the Blueprint publications and the National Board Certification System (Ysseldyke et al., 1984; Ysseldyke et al., 1997; Ysseldyke et al., 2006). In all of these arenas, the harbinger has been to move away from assessment and identification for special education towards prevention, intervention and supports in regular education.

Yet the research still suggested that theory has not moved into practice. Willis (2000) conducted in-depth interviews with psychologists in the Detroit Public School System to help gain context into the psychologists' perceptions of change within their field as the legal and system climates changed for school psychology. His results suggested that assessment was still an overarching role and moreover, within that system, was a source of job stress and strain in

that work environment. Further contextualization noted that school psychologists felt powerless, devalued, angry and disappointed over the current roles and functions that they were filling for the school system.

However, within the clarion calls for role change for school psychologists, the most recent legislative iteration found in the IDEA of 2004 and the NCLB Act of 2001, there was introduced a strong catalyst for school psychologist role expansion and role change to occur on national and state levels. IDEA 2004 essentially redefined the identification of certain disabilities such as specific learning disability and by proxy changed roles for the school psychologist in order to meet those changes in the identification process. In light of these recent legislative changes, the current research examined any shifts in roles for school psychologists in the state of Georgia. Similar to Lowry's (1998) study, this research used survey results to compare with earlier survey results from Kimball's research in 1998. Similar to Willis (2000), this research gathered some of the attitudes, beliefs and feelings through the use of interview information from veteran psychologists in the state to help contextualize the transformations of psychological services in Georgia.

Purpose of Study

The purpose of this study was to investigate the transformations of school psychology in roles and functions in Georgia's schools in light of the historical roles of school psychologists and the most recent changes in special education law IDEA 2004 and NCLB 2001. A comparison was made of actual role involvement and practices reported from Kimball's (1998) research data in Georgia using his survey modified with additional questions added to gather information on more recent role areas with regard to response-to-intervention (RtI) and Georgia's pyramid of interventions (POI). By examining roles through a historical and

phenomenological lens one can also gain a sense of how far the field has come and gain a sense for possible future directions in which to move. The magnitude of any recent shifts in role potential were contextualized and described through the use of interviews conducted with veteran school psychologists. The investigation examined how the experiences of the veteran psychologists perceived those changes and how practices have helped to contribute to a healthy field in service to the schools. Summary information was developed to illuminate what directions are suggested by the current status of the roles in school psychology.

The problem and need for an investigation into the current roles for school psychologists is that for the past century the primary role of assessment is being fundamentally changed by recent legislation with the 2004 reauthorization of IDEA (Public Law 94-142). The traditional assessment role and testing of intelligence is now included in legislation as optional with regard to assisting in the diagnosis of disabilities, especially the learning disability cases. It is important to the field to examine how this legislation and school system shifts are impacting school psychologist roles within Georgia. The study helped determine the degree that school psychologists have adapted to this major shift in roles. It also examined the feelings, attitudes and perspectives regarding such a change for school psychologists' roles and practice. Finally, it contributes to the field's narrative regarding ongoing practice and role evolution and adds to the conversation in how it is doing so and how effective these new roles are in service to children.

Research Questions

The following research questions were addressed in this dissertation study.

1. To what degree have school psychologists' roles and practices in Georgia changed when compared with the results of Kimball's (1998) and other studies?

2. What are the perceptions, attitudes and feelings of school psychologists in Georgia regarding the recent changes in the field?

Significance of the Study

I have been a practicing school psychologist for fourteen years. During my undergraduate experience, I had an opportunity to work with some youth struggling to stay in school and realized a need for mentors as well as gaining awareness of my own internal satisfaction in helping others. As noted by many in the field in Willis's (2000) study, I embarked on this career choice to provide benefit to the children within the schools that I worked. My experiences in serving students and school systems have been arguably unique but most certainly rich in exposure to a variety of school environments, school sizes and student demographic variation. During my first seven years, I worked for a Regional Educational Service Agency (RESA), which served twelve counties in South Georgia. I had the privilege of working in seven of those counties at one time or another which allowed me to experience a host of different operations, school systems, administrators, faculty and students. However, in that position, I also fit the status quo in terms of the school psychologist role, as my primary role was assessment. In those seven years, I conducted close to 1100 evaluations. I was a service psychologist who traveled from county to county, day to day.

That position was a far contrast to my current role as school psychologist in one larger sized growing county with around 10,000 students. At present I am school based and serve three schools. I am an integral part of each of these schools and work much more intimately with faculty and students. I have also had opportunity to reshape my roles in these schools from assessment towards other areas of service including direct services with counseling, crisis intervention, consultation with teachers and administrators, program planning and

implementation with behavioral and intervention programs and also in research with collecting and developing local normative data for the county. In part the role change was afforded due to the recent legislative changes at the federal and state levels. Hopefully, through the current study school psychologists can learn if different and unique role opportunities like these and others are occurring across Georgia (Georgia Association of School Psychologists [GASP], 2008).

The school psychologist has ranging roles and functions which are multilayered and multifaceted with several different parties and interests involved. The position is one of uniqueness and variety with unpredictability at every turn. Investigating role change is necessary for understanding what roles will be of benefit to future school psychologists and to the training programs in order to provide effective service and to be positive change agents within the schools.

The unique role and contribution of school psychologists is illustrated in the following example involving a teacher and his student. John was a teacher who taught Business Education in a medium-sized high school of around 2000 students. He enjoyed the challenges of reaching the varied student body as he taught all grade levels at the school. One ordinary day, he was teaching in the classroom as he did every other day that school year. As he lectured, a student, Mike, became disruptive. He asked Mike to please sit down and wait to speak out. However, Mike responded with more disruption and a belligerent tirade. Typical of teachers, John moved closer to the student to try and settle him with instructor proximity. But, this day suddenly changed from being ordinary to extraordinary. By the simple act of moving closer to the student combined with the verbal request, John induced a quite violent reaction. Mike lunged at the teacher striking him several times while cursing him before John was able to subdue him. It is important to note that John was a large framed man and Mike was much smaller and shorter. It

did not seem likely that such a benign request by John to “take a seat and wait to speak out” would invite that kind of a response. Yet this teacher instead of teaching that day was essentially attacked by the student. Adding insult to injury, John was brought before the board and further questioned because of complaints by Mike’s parents for “provoking” and injuring their son.

After a full investigation conducted by the school board, it was learned that Mike had been taking Zoloft daily for several months for depression. The parents did not tell the school or his teacher that their son was struggling with clinical depression and was also suspected of suffering from Bipolar Disorder until after the school psychologist was called in for emotional and informational triage between all the parties involved.

This is one of the more extreme but not unusual cases in which a school psychologist may become involved in a case. It was extreme perhaps more in the sense that the parents attempted to try and bring charges against what seems by all accounts to be an innocent teacher. Across the country each day, a percentage of students in the schools do carry emotional diagnoses and are under the care of a physician taking various psychotropic drugs (Rogers & McAfee, 2005). A school may remain unaware of a student’s condition until an ordinary day suddenly becomes an extraordinary day.

Mike’s parents eventually dropped their complaints and threats of pressing charges against the teacher. Sadly, John has since decided to leave the teaching profession impelled partly by the experience of this incident.

I highlight this atypical but very real scenario because it is this very intersection, between the ordinary and the extraordinary, that the school psychologist can quickly become involved in one of the many fluid dynamics of a school system. The field of school psychology, to remain effective, has to provide positive influences on children and education. School psychology’s

environment is within education and school psychology's goals of providing beneficial services to students, effective interventions for teachers and constructive consultations by school psychologists have remained steady.

Pinar (2007) stressed the importance of surveying a field's history to provide a context of where it came from and to better understand where it needs to go. By examining the roles of school psychologists in the frame of history and the recent past, the field may be able to infer what effect the changes have made in various ways both positive and negative. It is important to examine the role changes of school psychologists to better understand whether or not the field is meeting those goals held. Therefore, the conversation in the field on a more national narrative may be, is school psychology in danger of becoming moribund and reified? Or is the field still providing meaningful service to the schools and educational environment in which it functions?

A professor once said to me, "A field is growing, changing and adapting or it is dying." By attempting to examine the changes in school psychologists' roles and functions, one may be able to better grasp if the field is becoming moribund or producing new shoots of growth or "rhizomes" (Roy, 2003, p. 90). By examining roles through a historical lens, the field can gain a sense for possible future directions in which to move.

Summary

School psychology, in its infancy, was focused on educational needs as seen by a collection of professionals in semi-related fields. Early school psychologists helped promote the assessment role by moving it from experimental research to practical application. Thus, assessment became one of the dominant roles for school psychology. However, the field during the first half of the 20th century remained an amalgam of professionals which provided multiple

functions in the schools. The emergence of the field was not without challenge or controversy. Fagan (1990) had coined that developmental and growth era as “the hybrid years.”

School psychology coalesced and expanded nationally as a field in the latter 1960’s and 1970’s with passage of federal legislation and with increased involvement of national organizations. Studies during this period of the field and of education as a whole have resulted in criticisms with processes (e.g. disproportional representations) and with role calcification for school psychology. Systemic critiques have resulted in the evolution of educational law, educational process and the roles of school psychologists. This study examined recent role changes and practices for school psychologists in Georgia when compared with role research in 1998 and contextualized the current attitudes and beliefs about the changes that are occurring.

Chapter II

REVIEW OF LITERATURE

The field of school psychology is one of uniqueness in the school system. Often times the position is confused with guidance counseling or social workers who have overlapping components of roles that a school psychologist may at times fill but are not full time or absolute roles (Paisley & Borders, 1995). The school psychologist roles have been wide ranging since the beginning and it is important for practicing psychologists today to grasp from whence they came (Fagan, 1990; McAfee, 1988).

Thomson (2005) noted the importance of examining history, "...a deconstruction in which we recount its history in order to call its necessity into question, as a first step toward understanding things differently... between our present understanding of being and its historical origins," (p. 23) to better understand the present. Recounting aspects of school psychology's history is a cartographic journey of where the field has come from towards understanding its "was-ness" and what it is to become. A field needs to look back, around and within in order to move forward and progress. By looking back at those individuals who provided movement in the field, looking around circumspectly and within the contextualized position, one can hope to progress towards advancement in the field. The crucible of dialect ensures thought through responses that are weighed and weighty. A "History is central to the contemporary field. Certainly it is the site of ideological struggles..." (Pinar, 2007, p. xxv). This review examines early psychologists and their influences on education, forces and controversies which shaped school psychology, the entry of special education and psychologists' roles and influences today in education.

Early School Psychology Influences

School psychology has had many iterations since its infancy in the late 1800's and early 1900's. The field as a whole has had influence on education's journey in the United States with regard to learning, assessment, special education, behavior problems, mental health, higher education and other developmental aspects regarding students. The field itself was also influenced from ideas, ideologies and foundational fields stemming out of late 19th century philosophy, physiology, natural philosophy and maths in the United States and abroad in Europe. Early influential figures included researchers and theorists like William James, Sir Francis Galton, Wilhelm Wundt and Alfred Binet.

Psychology as a field has focused on pragmatism and practicality as central in its application of principles and theory toward different sectors in society.

What every educator, every jail warden, every doctor, every clergyman, every asylum superintendent, asks of psychology is practical rules. Such men care little or nothing about the ultimate philosophic grounds of mental phenomena, but they do care immensely about improving ideas, dispositions, and conduct of the particular individuals in their charge. (James, 1920, p. 319)

The field in its beginnings, as noted by James (1920), was to be built on the principles of pragmatism and functionality by applying working tenets and solutions to real world problems.

The American education system and its curriculum in the late 1800's and early 1900's was no exception despite the many forces that were driving its change. The industrialization, expansion west and realizations in the value of an educated society were some of those forces. School in the late 1800's was a rudimentary archetype of school today. Unlike the 180 day school year of today, the school year at that time varied by state but fell around 70 to 100 days

per year for the student in school (Thorndike, 1912). School was often mundane, rote, seasonal and, depending on the locale, lacked many of the basic supplies needed. Yet it had some semblance of classroom structure, a teacher and a building (Mondale & Patton, 2001). School had problems of many forms and through the new psychological field of study, early psychologists were focused on finding solutions.

America in the late 1800's was quickly changing from a predominantly agrarian society to one with factory workers and city dwellers. The Civil War had been over for several decades, and the population of the country was young. With a median age of 23 years old, the United States census data of that time period reflected that the population resided in the Eastern part of the country and predominantly in the cities with large households averaging seven members in the household ("Census Bureau", 2002). Immigrants were streaming in from Europe and the population of the country was growing. With these new immigrants and the population increases, society and the United States were undergoing change (Armstrong, 2004). Barkan (1992) noted that the United States expansion through immigration was on the minds of anthropologist, biologist, sociologist and psychologist researchers, as well as politicians. While change seemed imminent for the country, for education and for different disciplines taught at the universities, not everyone was happy about the additions to society. There was a concern about who was coming into the country (Barkan, 1992).

Psychology, a fledgling field in the late 1800's, was undergoing a change itself at the time moving away from the pseudosciences of phrenology, craniometry and biometry. The field at the time was moving away from posits like the brain was a muscle to be exercised or the idea that bigger brains were better brains, towards a new "scientific" empirical psychology which used measurement, data comparison and ordered scales to "classify" individuals within groups

(Kliebard, 2004). Psychology's methodological investigations led to discounting many assumed posits previously held and many new methods of investigation were taking place in America and abroad in Germany, England and France.

Psychological investigators like Wilhelm Wundt with his experimental laboratory in Germany, Edward Titchener with his structuralistic theory of the mind and James Cattell with his mental and physiological measurement lab in America moved the field from speculative theory and guesswork toward empiricism, measurement and scientific methodology. The positivist method which says, "to measure is to know" was the direction psychology was heading (Lesko, 2001; Richardson, 2006; Zenderland, 2001). Empiricism was the ideological direction for psychology and would be for education as well.

One of the early propagators of this new direction was Wilhelm Wundt. He is known as the father of experimental psychology. In 1879, he established the first experimental laboratory at the University of Leipzig called the *Psychological Institute* (Lundin, 1991). Wundt was credited with breaking from philosophy and refining introspection into a systematic study of human thought and perception. Wundt turned away from the philosophical spiritualism and materialism towards empirical and measurable research and experimentation with the goals of trying to understand the human mind, thinking and perception. The idea of actually measuring perceptions and thoughts versus philosophizing about them was novel at that time and not readily accepted. His series of 30 lectures on his ideas and theoretical foundations written between 1858 and 1862 were to introduce these new ideas to the emerging psychology field.

Wundt's physiological psychology used the empirical method to study the mind to examine how humans perceive, feel and think through measuring reaction times of sensation and other biometric analysis. His contributions included experiments and theories about attention,

feelings, associations and the mental workings within the mind (Lundin, 1991). At the time, his experiments of measurement were not easily accepted by those contemporaries around him.

Robinson (1977) noted that other psychologists, like William James, expressed reservation about dividing experience and separating or sectioning parts of perceptions. However, Robinson (1977) also contended Wundt was misunderstood and was not attempting to divide perception but to measure it.

Titchener, Wundt's protégé, was credited with translating and bringing Wundt's lectures and ideas to America. Other early psychologists like Hall and Witmer also studied under Wundt and then came back to America to begin their own research areas. Wundt's methods and theories were divergent from philosophy and approached new terrain in physiological psychology. He was influential to many future psychologists around Europe and in the United States including those who were instrumental in the emergence of school psychology (Lundin, 1991; Robinson, 1977).

Early Psychologists, Their Roles and Influences

American psychologist, philosopher and medical doctor, William James, is credited with bringing the study of psychology to American soil and establishing the first graduate school of psychology at Harvard University (Richardson, 2006). Its roots were tied to the study of the human mind, human condition and also to education and its problems. Always examining, studying and analyzing, James once said of psychology that, "human understanding is the art of grasping similarities among phenomena and thus forging perceptual patterns and conceptual categories out of the flux and chaos of existence." (Pajares, 2007, p. 26). He was looking for links and patterns in the norm of daily life and in the lives of people at home and at school.

James, an eloquent speaker, tended to portray himself humbly to teachers calling teaching an art which he would not presume to get involved in. He wrote about many topics and subject areas, one of which was teaching. In his series *Lectures to Teachers*, he says,

The art of teaching grew up in the schoolroom, out of inventiveness and sympathetic concrete observation. Even where (as in the case of Herbart) the advancer of the art was also a psychologist, the pedagogics and the psychology ran side by side, and the former was not in any sense derived from the latter. The two were congruent, but neither was subordinate.

(James, 1899, p. 15)

And yet, despite his humble pronouncement of not knowing as teachers do, many of his works were in the form of lectures to the teachers of the day (Reed & Johnson, 2000). His lectures spoke about differences in the pedagogical systems of education (or curriculum) in America and abroad at that time. He mentioned changes from the old style American Recitation Method, the pure lecture system of Scotland and Germany, to the English tutoring system. James (1899) also mentioned structural changes in terms of coeducational classrooms beginning and increasing the focus on the student as a learner. He said of the sciences of the day that they do not generate arts out of themselves in speaking of psychology as a science and of teaching as an art. Yet, as we shall see, in time science began being imposed on the “art of teaching” in many ways.

The new psychology era brought with it a focus on many elements related to education. The novel ideas and focus of research spawned hypothesis generation which included many aspects of human development such as behaviors, habits, reactions, memory, attention, motivation, perception, acquiring ideas, making connections (associations), learning and

knowledge. James (1899) suggested that psychologists were able to use the education system as a fertile ground for experimentation of new ideas regarding children's learning and development. And so various experimentation was conducted in the schools always searching for new and better ways to do something and better ways of knowing. Empiricism was the new method for psycho-educational investigation and indirectly for pedagogy and education as well.

However, psychology, like any new field, also was to be on the theoretical "cutting edge" for the time. It was to investigate, debate and hold to the most current theories of the day. Darwinian evolution was influencing many fields of that day including theoretical hypotheses in psychology.

The facts of evolution have crowded upon the thinking world so fast within the last few years that their philosophy has fared rather hard. Chaotic cohorts of outlandish associates, the polyp's tentacles, the throat of the pitcher plant, the nest of the bower-bird, the illuminated hind-quarters of the baboon, and the manners and customs of the Dyaks and Andamanese, have swept like a deluge... (James, 1920, p. 147).

This was written in 1879 and William James was commenting on how the theory of evolution was so enamoring to the scientific fields that they felt "We are the truth and the whole truth, they cry." (p. 148) and that philosophy was left for dead. Indeed as Lesko (2001) pointed out, the theory of evolution would have rippling effects on many of the sciences and the philosophies generated from them. Psychology was one of those which fell under the spell of evolutionary theory which influenced many of the pioneers and theorists of that time.

Early "school" psychology roles included hypothesis generation and experimentation into ways of knowing, how to address learning and instructional problems using the scientific method, measurement and observable data. Riley-Taylor (2002) noted that education's

pedagogies were through “rationalistic models” and “industrial models” of school (p. 9). Indeed, early psychology programs were involved in experimentation and education science. The field of psychology was still “becoming” as Roy (2003) might term it. The few, like James, who were at that time working in schools were establishing themselves in those in between spaces, “between system and environment resonates with the notion of becoming” (p. 50).

Richardson (2006) in his biography of William James noted one of those in between spaces for William James. In 1875, James wrote to the then president of Harvard, Charles W. Eliot, and proposed a new course which James wanted to teach. It was to be a synthesis of philosophy, medicine and physiology and also examined mental sciences to include logic, history of philosophy, metaphysics and psychology. He was well suited as a medical doctor, philosopher and psychologist. “James had an interview with Eliot during December;... The new course, Natural History 2: Physiological Psychology was offered during the next school year.” (p. 168). This new course offered was the humble beginnings of psychology at Harvard University.

Those who came shortly after James pioneered psychology programs at other universities, institutes and clinics around the United States. They included leaders like G. Stanley Hall, H.H. Goddard, E. L. Thorndike and Lightner Witmer (Fagan & Wise, 1994). G. Stanley Hall, earned his doctorate in 1878, after studying psychology in Germany under Wilhelm Wundt. While in Germany, the young Hall was also influenced by the German culture. Lesko (2001) noted that the German youth movement at that time included a “...portrayal of strong, young Aryan men united against imagined others, these images powerfully linked youthful, virile, heterosexual, white men...” (p. 52). The momentum of the time and German philosophy tended to idealize and romanticize Aryan youth and adolescence. Hall took the focus of youth back with him to the United States. He came back to America as a professor at John’s Hopkins University

(Manon, 2006). Once back in America, Hall founded the American Psychological Association (APA) and also established the child study movement. His seminal publication in 1883 was his book *The Contents of Children's Minds* which established him as a leader in child study. He also expanded in the early 1900's to address adolescence with another publication (Lesko, 2001).

Hall influenced change in the direction of curriculum for schools in the late 19th century and was also credited with helping initiate a new movement in psychology towards an educational focus (Fagan & Wise, 1994; Kliebard, 2004). The child centered approach to education was something new and different. Earlier school life was often times a small building with single stove and 30, 40 or 50 students to one teacher. Any new ideas being advanced were typically at a "snail-paced gait" (Mondale & Patton, 2001, p. 25). Hall, taking advantage of the Deleuzian "dynamic states" (Roy, 2003, p. 51) or what I would call curriculum flux, moved aspects of education towards being child focused or as he called it, a child study.

Alfred Whitehead, mathematician and philosopher, discussed the importance of keeping education interesting, child focused and applicable to life. He said, "The pupils have got to be made to feel they are studying something and not merely executing intellectual minuets" (Whitehead, 1929, p. 9). He wrote about the "rhythm" of education in terms of mental stages of growth. This was similar to the Piagetian construct of cognitive growth stages and readiness to learn. Piaget did this by examining children's mistakes and arrival at solutions. Whitehead propounded that education's learning (from mistakes) was about knowledge. He said,

Knowledge is one chief aim of intellectual education, there is another ingredient, vaguer but greater, and more dominating in its importance. The ancients called it "wisdom". You cannot be wise without some basis of knowledge; but you may easily acquire knowledge and remain bare of wisdom. Now wisdom is the way in which knowledge is held. It

concerns the handling of knowledge, its selection for the determination of relevant issues, its employment to add value to our immediate experience. (Whitehead, 1929, p. 30)

Teaching a child not simply facts but to use knowledge in reasonable ways and to handle knowledge in wise ways was what Whitehead was referring to as wisdom. And like Whitehead, Hall before him had, in around 1899, developed the child centered approaches to learning. These were carried out initially in the Department of Scientific Pedagogy and Child Study which was in the Chicago Public Schools. This was the first 'clinic' facility that was operated within the public school system (Fagan & Wise, 1994). His focus on the child in the school setting and dealing with problems from this perspective was a novel shift towards the child (Kliebard, 2004). However, Hall's theoretic basis for his child centered methods was called recapitulation theory.

Hall's notion of child study was different from that of what Whitehead and Piaget addressed. Recapitulation theory had Darwinian underpinnings regarding the influences of human development. The sciences of the time were linking the evolutionary development process to all animals including the human species. "German zoologist Ernst Haeckel originated the catchphrase "ontogeny recapitulates phylogeny" to capture the ideas that the ancestral lineage of the human species could be read off the stages of a child's growth" (Lesko, 2001, pp. 31-32)

The science of that time regarded children as "savages" who were not fully developed into the adult "civilized" world. They had to go through the recapitulated evolutionary stages of growth as they developed. This terminology originated out of the various original explorations around the world such as "the dark continent" of Africa and new world of Australia in recording the novel cultures and peoples. Hall applied this evolutionary sequencing to the developing child over the growth stages. The child would go through these stages as he/she matured from animalistic baby to savage child towards adolescence and to civilized adulthood (Lesko, 2001).

Recapitulation theory ideology followed the psychology field forward. Thorndike, a student of William James, also held to Darwinian influences as did much of the science of the day. He also studied students using the lens of recapitulation theory. Thorndike (1914) noted in his book *Educational Psychology* that development of order follows the same path as the ancestral race and development would progress sequentially in the same evolutionary path as the organism. This theory was held in regard and did not have negative connotations for that day. Many emerging fields at the time had been influenced by evolutionary theory including biology, anthropology and sociology. Recapitulation theory was portending what Lewontin et al. (1984) described as a later phenomenon which permeated many fields at that time and held the function of biologic determinism for those fields' perspectives of society and race. "Ultimately, all human behavior... is governed by a chain of determinants that runs from the gene to the individual to the sum of behaviors of all individuals." (p. 6). Recapitulation was a type of evolutionary determinism which was expressed in the behaviors of children, children's development and resulted in the reification of racial, mental and developmental perspectives for many in the field at that time.

Psychologists were filling a role in education through theory generation, experimentation and the dialect of the science of learning. It would take decades for the science of learning to be translated into the science of teaching with the 1949 *Tyler rationale* becoming adopted across the country. Thorndike (1912) in one of his earlier comprehensive works *Education* published for future teachers the various aspects of school, education, development and learning. His work is an echo of many facets of schooling today. While rudimentary by today's comparisons, it was original for the time and his underlying constructs were in sync with many issues that today's schools are concerned about. His work overall dealt with the meaning, materials, means and

methods in educational practice. Thorndike promoted a student centered approach to teaching and a systematic way to measure learning. He addressed issues like culture, mental discipline and individual differences. Addressing teacher selection (hiring), Thorndike acknowledged the discrimination which occurred towards women in the teaching field at that time. “With few exceptions, the choice of a woman rather than a man has meant and still means that the woman is so obviously able to do the work better, according to the standards of the time, that she is chosen in spite of sex prejudice.” (Thorndike, 1912, p. 156).

Thorndike (1912) also dealt with issues in curriculum such as the class selection for high schoolers, the sequence of courses, correlated (cross content) coursework and psychological needs. Two areas of “need” he noted were of drawing and woodworking for children. He also dealt with methods of instruction addressing elements like the law of impetus (habit forming), the law of constancy (consistent and routine) and the law of repetition (rote exercise). Finally, he addressed the results of education. Thorndike addressed measuring educational products and the “scientific” study of education. Thorndike reported the measuring (evaluating) of handwriting by grade, solving arithmetic problems, looking at speed, accuracy and the environment to account for student differences among classes and schools much like RtI today.

Thorndike’s research led to his hypothesis about connectedness and mental functions organization in relation to education and learning. He researched and wrote on topics such as the capacity to learn, the amounts, rates and limits of improvement and of mental fatigue. Defining learning he said, “Learning is connecting, and man is the great learner primarily because he forms so many connections.” (Thorndike, 1914, p. 173). Thus, his hypothesis about “connectionism” was born and was applied to functions of learning. His discussion about

connections and habits were a precursor, arguably, to B.F. Skinner's work on stimulus-response classical and operant conditioning.

Lightner Witmer may not be as well known to other disciplines outside of psychology. He was credited with influencing education from a psychological lens, particularly for the field of school psychology. A contemporary of Hall and James, he also earned his doctorate in training under Wilhelm Wundt in Leipzig, Germany. Witmer was said to have coined the term "clinical psychology" (Fagan & Wise, 1994). Witmer founded and was professor of the first psychology clinic in the United States in 1896 at the University of Pennsylvania. He also established a residential school to help children with learning and other problems in school (Belloch, 1997; Gray, 1963). He founded the journal *The Psychological Clinic* in which much of his theory was operationalized into practice. Witmer worked to help children with behavioral problems and learning handicaps. His work centered around problems relating to the student in the school setting (Fagan & Wise, 1994). He used his clinic to study, research, teach and remediate the difficult problems of the day. He used the journal he founded to publish and disseminate his and other psychologists' findings. Witmer was considered the father of school psychology because of his union of children's problems, schools and psychology.

Witmer used his role as research psychologist in the schools as dialectic with others in this field. He published and coauthored many articles in the journal he founded. Fulfilling the role as experimenter, he searched for better methods of measuring and capturing the stages of development and the ranges of performance for students. One example of his early research and pursuit of efficiency in the measurement of children's skills was his Witmer Cylinder. The Witmer Cylinder was used by Franklin Paschal, a protégé of Witmer's, in his dissertation in 1918. The apparatus was used to measure the psychomotor speed and fine motor skills of school

aged children. Apparently, it was an improvement over earlier motor tests such as the puzzle box which at the time yielded low correlations with grades (Paschal, 1918).

The term “psychological clinic” used by Witmer at that time was not thought of as it may be today. It was not a hospital, institution or counseling center but the clinic was more of a laboratory setting similar to his doctoral training, which he received in Germany. It was a place to study, research, measure, observe and teach in a controlled environment in search of elucidations to a variety of problems that the children were having. Unlike clinical psychology of today, his focus was on children instead of adults and places where they have problems, like in schools.

Psychology at this time was moving towards pragmatic, utilitarian and functional directions propelled by empirical methodology and deterministic ideology. Education was moving similarly towards a “scientific” and social construct direction which Kliebard (2004) termed the *social efficiency* movement. Education and curriculum leaders like John Franklin Bobbitt, who had published *Curriculum* in 1918, built upon Thorndike’s earlier ideas of connectionism and scientific management as well as industrial production and work efficiency concepts. Bobbitt attempted to fully script instruction in a scientific fashion what he termed “activity analysis” (Kliebard, 2004, p. 99). It was Bobbitt who later influenced Ralph Tyler and his work with the curriculum development in the 1940’s. Echoes of the Tyler rationale within education is felt today within outcomes based education.

With researchers, theoreticians and philosophers each looking at education slightly differently, the American education system was influenced in several ways. Three overarching areas of influence by psychologists on education in the early 1900’s were the shift towards a child’s perspective and needs in child study focus, the search for effective education through

scientific and efficiency methods of instruction and the emerging learning theories and attempts to apply them in the classroom.

In the early 1900's the roles of these psychologists were expanding in different directions. The "school" psychologist's areas of investigation, experimentation and research were generally related to children's behavior, learning and education. They were expanding within education and establishing themselves through the scientific method, linking learning, behavior and the relationships, purposes and capacities of each. School psychologists emerged in the role of researcher which included investigating, measuring, analyzing and applying new theory from the perspective of teaching and the perspective of learning. Early psychologists were interested in measuring the capabilities and limits of various functional skills of students at differing ages.

Paradoxically, this expansion led later towards a limitation of education in the schools that Dimitriadis and McCarthy (2001) described as, "Education becomes a kind of normative science on this logic, one that aims for a totalizing vision and control over knowledge, and that robs teachers of their calling as transformative intellectuals" (p. 52). Such scripted curriculum and instruction, the logical conclusion of the Tyler rationale, was descriptive of the *anti-intellectualism* argued by curriculum theorists today.

Emerging Roles and Functions with Americas Expansion

American education in the early 20th century was transforming under the movements of the industrialization, World War 1 and the continued influx of immigrants. The focus for education at the time was to streamline and become more efficient due to limited resources and increasing expenses associated with the growing populations. Education's charge, under *social efficiency*, was to teach children how to behave with each other and act in society. Interest and

attention was on social efficiencies and the beginnings of the scientific education movement (Kliebard, 2004).

Psychologists at this time were focused on society and the school was viewed as a tool to help shape society for the betterment of America (Zenderland, 2001). The school systems were also expanding with the population increase of the country (see Table 1) in the early 20th century.

Table 1

United States Census Population Data

Year	Total	Growth	Percent Increase
1900	75,994,575		
1910	91,972,266	15,994,691	17%
1920	105,710,620	13,738,354	13%

Note. Sources of information are “Census Bureau 10” (2008), “Census Bureau 20” (2008).

Mental Testing and Innate Intelligence

Measurement of children’s learning and innate intelligence became an interest to psychologists around the turn of the century in the United States and abroad for a variety of reasons. There was the problem of identifying and handling those students with lower reasoning capacity. In France, Alfred Binet and Theodore Simon had been working with the Minister of Public Instruction in Paris and were asked to study the best ways to educate children who could not learn in the school system. Binet and Simon used this opportunity to hone a series of increasingly difficult mental tasks. These questions and problems were given to normal and retarded populations in France to devise a way to measure cognitive development along a scale. Binet eventually devised what became known as the “1905 scales” and “Binet scales”. This was the first well developed and straightforward psychometric mental test of cognitive development.

This test was used to “grade” children based on correct answers and was used to derive a “mental age.”

For other researchers, there was also the problem of discerning inheritable skills and acumen. Sir Francis Galton, a biologist and relative of Darwin, had believed that innate ability was inherited and set out to research this area in the latter 1800's (Zenderland, 2001). He was the primer for the Eugenics movement or as he described the “law of ancestral inheritance” (Barkan, 1992, p. 139). Galton had kept detailed records of children who were related and unrelated and cataloged the similarities and differences. His measurements focused on progeny and their physical elements believed related to intelligence at that time such as perception (visual and tactile), muscle strength, and reaction times of different lineage and ancestry. Galton, in trying to analyze his work, pioneered the mathematical correlation technique during his research of inherited intelligence and mathematically influenced researchers who came after him.

American psychologists expanded the ideas of inherited ability and set out to try and measure it. James Cattell was an American experimental psychologist who trained under Wundt in Germany before returning to America. However, on a trip to Cambridge University in England, he met Galton and became interested in his ideas. Cattell focused his research on measuring intelligence and was known as the first one to coin the term “mental test” in literature. He, like Galton, believed that mental ability could be measured by accurately discriminating sense perceptions and reaction times (Anastasi, 1988).

However, Binet's approach to measuring intellectual development was not physiological (biometric) in approach but mental and instead of counting reflexes or timing reactions, he was measuring correct answers from incorrect answers and comparing them to expected results based on the subject's age. “Binet's scoring procedure was quantitative in a different sense... Unlike

Cattell, Binet now counted neither seconds nor centimeters; instead he recorded the number of tasks or questions completed satisfactorily..." (Zenderland, 2001, p. 96).

Later generations of intelligence tests transformed cognitive performance into today's popularized deviation IQ score rather than a mental age (Anastasi, 1988). However all of these quantitative techniques whether physical or mental would eventually, in later test versions, be analyzed using modernized statistical techniques.

Galton noted that a wide variety of human measures, both physical and psychological, conformed graphically to the Gaussian bell-shaped curve. Galton used this curve not for differentiating true values from false ones but as a method for evaluating population on the basis of their members' variation from the population mean. (Sprinthall, 2007, p. 157)

Social scientist pioneers including psychologists relied on the statistical concept called the Central Limit Theorem to collect and analyze their data. The Central Limit Theorem follows the phenomenon that when successive random samples of data are collected from a population, the sample data assumes the shape of a Gaussian (normal) curve (Sprinthall, 2007). Thus normality was reified as measurable, quantifiable and comparable among individuals and groups. It was to dominate IQ measurement theory.

Others in Europe at the time used increasingly complex test items such as arithmetic problems, sentence completion and memory to attempt to assess intelligence. The Binet 1905 scales used these general principles to measure the intelligence or the mental capacity of the child. The modified 1911 scale was used in the United States for children up to age 10 or 11 years old and provided the promise of objectivity and protocol of procedure (Melville, 1917). Early research directions and disagreements among the mental testers of that time revolved

around topics like what is the average mental age of an adult (Gould, 1981). The 1905 Binet scale's development and design properties, ease of use and practicality led to its widespread use in Europe and the United States. Assessment and specifically IQ assessment emerged as a primary role for school psychologists thanks to the promotion by early psychologists.

Goddard was credited with bringing the Binet scales to America's consciousness and translating much of Binet's corpus into English (Zenderland, 2001). It was Goddard who collected his own data using schools in New Jersey in testing some 2000 students. His results led to the 1911 Binet Scales updating the norms by using his data collected. Goddard was able to shape one of what would become the school psychologist's primary roles in schools. Goddard contributed towards legitimizing intelligence testing for use in schools through teacher training at the Vineland, advocating for the usefulness of the Binet in the normal schools and conducting system wide assessments in the New Jersey and New York City schools (Zenderland, 2001).

According to Zenderland (2001) by the time the 1908 Binet was renormed in 1916 using Thorndike's results, Goddard had distributed approximately 22,000 Binet tests. America had taken an interest in intelligence tests, so much so, that even the Chicago Daily Tribune newspaper actually printed a complete set of questions in their paper in 1915 (Zenderland, 2001). Although 22,000 Binets had been distributed this did not mean there were 22,000 school psychologists at the time. Fagan (1995) estimated there were only about 200 school psychologists in the workforce around the 1920 period. Zenderland (2001) noted that many of the leaders in the psychometric measurement field of the time were concerned about the *amateur* Binet testers. Some of these amateurs included teacher testers who were trained by Goddard himself while others simply had asked for a copy of the Binet from Goddard. Thorndike, Wallin

and others voiced concern over the misuse and over reach of these non-professionals using the test. They recommended specific training and credentialing to administer the Binet.

Intelligence testing was not used only for those who were very low functioning but also within the “normal” school populations. The early mental testing researchers set out to differentiate between students through a method called differential diagnosis which is still used today in the psychological, psychiatric and medical fields. But mental measurement had different research approaches in different parts of the world. We have discussed Binet’s problem and approach to measuring intellectual development, as well as, Galton in England and Cattell in America and their research pursuits in the late 1800’s.

The mental testing research in the 1910’s and 1920’s also became a means for eugenicists to investigate and establish theory on the hereditarian views of intelligence. This research consequentially bolstered notions of determinism, eugenics and stereotypes which have plagued American society (Gould, 1998; Lewontin et al. 1984; Zenderland, 2001). Both Galton and Cattell were researchers who believed that intelligence was inherited and variable through lineage. This hereditarian view had its roots in Darwinian philosophy of the fittest and held hope that the problems of low cognition could be eliminated through eugenic procreation (Lewontin et al. 1984; Zenderland, 2001). Galton holding a hereditarian view contrasted with Gould’s (1981) assertion that “hereditarian theory of IQ is a home-grown American product” (pp. 187-188). Nevertheless, Cattell did continue with innate intelligence and hereditarian research. Eugenics became a popularized theory in the 1910’s and 1920’s on a global social and political scale. Sadly, it was borne out through the Nazism movement in the 1930’s and 1940’s, as well as, through the perpetuated plague of racism. Eugenicists worried that after the *Great War*, the

immigrant influx could reduce the gene pool and the natural order in the United States and Europe (Barkan, 1992).

Intelligence was seen by Goddard as the thermometer for measuring many of society's ills at the turn of the century including depravity, sexual deviance and crime. Feeble-mindedness was believed to be the cause for many problems in society at the time and immigrants as carriers of the problem were a concern (Barkan, 1992; Goddard, 1922). Intelligence tests during World War I also "measured" differences among races to extend racial difference and stigmatize classes (Lewontin et al., 1984; Zenderland, 2001). Goddard (1922) promoted mental assessment for delinquents and indirectly promoted a deterministic view of the psycho-asthenics (weak minded) which destined them as an underclass within society. Goddard theorized that criminal activity and promiscuity were the results of feeble-mindedness and feared the production of their offspring.

By the 1920's eugenicists and hereditarians were using IQ test data to enhance their theory and movements in groups like the popularized Eugenics Society and the Galton Society (Barkan, 1992). Large data sets, like the Army Alpha test, were analyzed for intelligence theory development. The Alpha test was a large group administered intelligence test which had been developed by Robert Yerkes. It was used for placements of new recruits entering the military in World War I. The Alpha Test was a means to cipher through half a million male recruits needed for a variety of positions during the war. A second version called the Beta Test was also developed for recruits who could not read (Anastasi, 1988). However, despite the expediency and efficiency of these group tests in aiding the military, the test results were also used to justify status positions within societies in America and abroad (Lewontin et al., 1984). Early race theory had rank ordered the "races" by intelligence, "...eugenicist theory of the day, which held there

were three distinct white races in Europe- in descending order of intelligence, Nordic, Alpine and Mediterranean-...” (Lemann, 2000, p. 30). The black race and Jewish ethnicity at that time were believed to rank towards the bottom of the order (Barkan, 1992; Lemann, 2000)

However, in the 1930’s the study of intelligence as measuring native or innate intelligence began to be questioned. An assistant to Robert Yerkes and fellow eugenicist, Carl Brigham, wrote a book on eugenics theory called *A Study of American Intelligence* which propounded the current theory of that day. Yet it was the same Carl Brigham who some 9 years later essentially recanted his stance on eugenics in an antithesis work called *A Study in Error* in 1932. Brigham noted that early enthusiasm affected assumptions and clouded perceptions of what the data was really measuring (Barkan, 1992; Lemann, 2000). Despite emerging controversies to the hereditarian theory at that time, Anastasi (1988) acknowledged that the large scale testing efforts in the 1910’s and 1920’s helped to bring IQ to the American consciousness making the public aware of intelligence and intelligence theory.

An important early development of intelligence theory was that of unitary intelligence. Spearman, an English psychologist, in the 1900’s studied the statistical relationships of intelligence datum groupings or “factors” and pioneered the factor analysis technique which influenced intelligence theory. Spearman’s analysis of intelligence datum was summed up in the *g* factor of intelligence which he described this *general* or unitary factor of intelligence. He theorized it as a “mental energy” (Anastasi, 1988). This novel concept of intelligence comprising a common or single broad factor was unifying for intelligence theory and was based on Spearman’s newly developed statistical properties. However, later criticisms described Spearman’s *g* as a grand average which was based on false assumptions (Gould, 1981).

Spearman's protégé, Cyril Burt, extended Spearman's techniques and developed an additional four factors of intelligence. Cyril Burt, was also an English psychologist, and had expanded on the hereditarian theory of Galton to study what he purported as innate intelligence. But in the 1930's and 1940's Thurstone, a fellow researcher, criticized his factorized work as statistically unsound. Burt migrated his research to concentrate on studying twin sets to bolster his theory regarding innate intelligence. Initially, this hereditarian research was lauded as foundational and ground breaking. His data substantiated the innate intelligence theory. However, an analysis in the 1970's of Burt's longitudinal work of twin studies purporting innate intelligence led to substantial doubts in his methodology and his results. Gould (1981) and Lewontin et al. (1984) noted that many of Burt's propositions about innate intelligence research were revealed to be fallacious. Gould (1981) pointed out that in the 1970's many of Burt's twin study data sets were strongly suspected of being fabricated which discredited the theory and put IQ measurement of innate qualities in doubt.

The story of Burt's undoing is now more than a twice-told tale. Princeton psychologist Leon Kamin first noted that, while Burt had increased his sample of twins from fewer than twenty to more than fifty in a series of publications, the average correlation of pairs for the IQ had remained unchanged to the third decimal place- a statistical situation so unlikely that it matches our vernacular definition of impossible. (p. 265)

Burt was also reported later in his life, long after Spearman's death, as claiming credit for part of Spearman's research. Some attributed his new assertions to a failing mental capacity (Gould, 1981).

Despite the criticisms of specific intelligence researchers during various periods, in the early 20th century the term IQ and intelligence became a popularized notion and was seemingly

easy for the general population to understand. Thus the research, theory generation and practical uses of IQ tests moved mental assessment towards the central role for the school psychologists. As intelligence test development and design became more sophisticated, the populations of those tested also expanded. Lemann (2000) noted that the use of testing moved from schools and military applications to also becoming popular at the college entrance level. In the 1920's and following, the IQ tests were modified for the college board exams and later transformed into what became known as the *Scholastic Aptitude Test*.

Intelligence test scores moved from the child having a certain "mental age" to yield a more stable ratio score developed by German psychologist William Stern. Stern divided the mental age by the chronological age which provided for a ratio known as *intelligence quotient* which was numerically similar to the popular IQ numbers often thought of today (Anastasi, 1988; Gould, 1981). However, ongoing refinements in data analysis and test development over time did not suppress some of the continuing controversies, perpetuated myths and criticisms. Especially during the 1960's, intelligence assessment bias and mischaracterization of segments of students followed the field into the thoroughbred years and into the courts, schools and legislation.

Special Education Connection

In addition to testing, the psychologists' roles and functions included more emotionally heart wrenching areas of education. In the early 19th century there was little instructional support in place to educate children who were different from the "normals" (Goddard, 1922). Many schools at the time were called *Normal Schools* for children who fell in the perceived *normal range* of academic functioning. Schools for children with special needs were only beginning to take shape beginning in the early 1800's. The first special schools were for observable deficits

such as being completely deaf and/or blind. These were established in the early 1800's. Often times, the education of handicapped children occurred at the same facility regardless of the type of handicapping condition. These were usually permanent resident institutions (Wallin, 1924). There was a limited understanding of the capabilities for many of these children trapped in these institutions. Assumed limitations by those who saw only their physicality left these children in the institutions to atrophy. However, through experimental teaching, continued research on development and children who became well known adults like Helen Keller these attitudes began to slowly change from the assumed limitations.

France indirectly provided Alfred Binet to help American psychologists with the problem of determining mental capacity and which later led to the categorization of students. According to Wallin (1924), France had pioneered many educational pedagogies for the disabled which America later imported, and arguably distorted, for use within its own schools.

It is apparent that France enjoys the distinction of having originated the modern science of corrective pedagogy. To France we owe the oral method for training the deaf, the embossed type for training the blind to read, the "physiological method" for training the feeble-minded – and more recently the Binet-Simon "method for measuring the development of intelligence of young children," which has greatly stimulated the establishment of classes for the subnormals. (Wallin, 1924, p. 19)

Early America imported many ideas and systems from the French fields of study. Clearly, at this period of America's educational history, France impacted a lot of what the United States education system was providing for handicapped students of the day. Intelligence testing became a popular method of sorting students in school or as Wallin described it above "measuring the

development of intelligence” which became and has remained a primary role for school psychologists into the 21st century (Hosp & Reschly, 2002; Willis, 2000).

Wallin (1924) described that the outcomes of the testing and categorizing which resulted in special classes or schools that were *permanent* for the student’s educational career. However, he also warned, even at that time, that determinations made should include *the entire context* of the student when making educational decisions rather than relying exclusively on the intelligence test alone. This is a practice that has extended to psycho-educational evaluations conducted today.

The new psychology included enlightenment and a better understanding of many disabling conditions such as mental retardation. Rather than demon possession or disease being ascribed to this condition, a French physician, Jean Esquirol, in the mid 19th century attributed the “feble-mindedness” or “idiocy”, as termed, to a condition of arrested development (or retardation). One of Esquirol’s students, Edwin Seguin, became instrumental in setting up a systematic education in France for feble-minded students beginning in 1837 (Wallin, 1924).

Seguin was a teacher, a physician and “psychologist” who developed the “physiological method” of education for mental defectives. This process dealt with strengthening the children’s movements and feelings. His school sought to build and strengthen through exercise and comparison training. His theory for this type of education was thought to be built upon the scaffolding of muscles and senses to the mind and intellect. The hope for this at the time was that by helping the child in rudimentary fashion to move and feel eventually, the training would advance towards educating the senses, notions and thoughts (Wallin, 1924). In today’s terms this type of method used sounds very similar to what comprises occupational and physical therapy in schools at present.

Seguin eventually left France, around the time of the revolution in 1848, to come to America. In the United States he was instrumental in establishing the first American institution for the feeble-minded in Massachusetts. He went on to help establish institutions for *idiotic and feeble-minded youth* in several states beyond Massachusetts, including Pennsylvania, New York and New Jersey (Walling, 1924). These were the beginnings of special education in the United States for handicapping conditions other than deaf or blind students. Residential institutions and classes began to emerge beginning in the northeast United States. Gray (1963) noted that by 1911 the number of schools or classes offered to the mentally retarded had grown to over 220 cities across the country.

One such early example in Vineland, New Jersey was opened in 1906 and used the methods of instruction founded by Seguin (Zenderland, 2001). The Vineland Laboratory School was used to study the feeble-minded, the imbecile and the moron. Goddard (1922) quoted Earl Barnes who spoke optimistically in 1903 about the future school. "To me Vineland is a human laboratory and a garden where unfortunate children are cared for, protected and loved... It may very well be that the most ignorant shall teach us the most" (p. 8). School was thought of as a place of study just as William James voiced earlier about schools. Indeed continued research studies have helped society and communities become more aware of differences in the disabling conditions rather than aggregating everyone. Throughout the 20th century, psychologists and other fields enlightened society that there was not just one type of disability but many different categories of disabilities and thus not just one way to educate those with special needs. In the early 1900's, the schools were set up for research, for the betterment of society at large and to provide guidance to one type of disability, the feeble-minded (Goddard, 1922).

Goddard, a psychologist who worked at the Vineland Institute became one of the early intelligence test proponents based on his experiences with the Binet Simon 1905 scales which he used at the institute. He had been trying to find an instrument which would more accurately differentiate those who suffered from *psycho-asthenics* or weak minds (Goddard, 1922). According to Zenderland (2001) Goddard was convinced of the usefulness of the Binet especially after he tested the 400 students at Vineland and found much agreement between the Binet mental age results and the teacher's experiences and estimations as well as his own observations of those students in the institution.

He worked on developing accurate descriptors for mental ages of those who he tested (Gould, 1981). Goddard developed additional test data with which to derive mental ages using thousands of students in New Jersey schools and single-handedly promoted the usefulness of the Binet within the school systems around the country. He was especially credited with helping the medical community and residential settings in realizing the usefulness for determining differences in the feeble-minded populations (Zenderland, 2001). Unfortunately, these terminology differentiations also led to widespread derogatory nomenclatures for American society.

Goddard coined the term "moron" used as his descriptive term for individuals with mild mental retardation as opposed to the term of "idiot" which generally was known as a more severe form of feeble-mindedness. Strange as this may sound today, this delineation of the feeble-mindedness was welcomed at that time by the medical and psychological communities. "To the American institutional physicians, Binet's achievement, especially explained to them by Goddard, was nothing short of remarkable...For the first time, American medical superintendents of institutions for the feeble-minded shared a precise diagnostic vocabulary..."

(Zenderland, 2001, pp. 103-104). However, today we know society has perverted these terms into derisive attacks on each other.

The field moved into other problem areas beyond the differentiation of the lower end of the IQ spectrum and general learning problems and into specific learning problems such as the phenomenon of reading or other learning problems. The educators experienced perplexing difficulties with students who by all accounts were normal and yet were unable to read but could do math or read but not write.

Investigating Learning Problems

One cannot understate the importance of reading. "... reading literature can be the focal practice that creates the possibility of deep insight." (Sumara, 2002, p. xiii). To have the possibility of not only learning but producing understanding of ideas, conjecture, and insight one must be able to read the words on the pages of scholarly text. Feuerverger (2007) spoke about her early memories of school which were fond memories and good memories. "Right from the start I loved to read. I adored the "Dick and Jane" series. They made me feel cozy and protected... took me away from my problems... offered me life" (p. 38). Reading was a primary activity at school which provided a sense of comfort, escape and hope. However, the phenomena of students who seemed bright and attended school, but were unable to read began to be noticed and investigated in the late 1800's and was not recognized more fully in schools until some 75 years later in the United States by the federal government. Exploration began by psychologists, doctors and others into other specific learning problems one of which was originally described as "word blindness."

Original terms for learning disability used in Western Europe and in the United States included the earliest form known as *word blindness* (Snowling, 1996). Later terms for reading

problems included *dyslexia* (Opp, 1994), *cerebral dominance* (Orton, 1937), *brain injured* (Strauss Syndrome) and *minimal brain dysfunction* and finally to the modern term of *learning disabilities* used today (Hallahan & Mercer, 2001). Early studies and hypotheses around the reading disorder were conducted by doctors, neuroscientist researchers, psychologists and ophthalmologists through unfortunate accident victims, unwanted happenstance like brain lesions and abnormal developmental conditions. They tried to discover what area of the body was affecting learning and focused primarily on the head and the brain. Was it the eyes, the ears, the neuromuscular system, the brain or a combination affecting reading? Parents of these children had the difficult task of coming to grips with the paradox of their child presenting as an intelligent-nonreader seemingly normal and yet unable to read.

The parent and the student were both frustrated and confused about a child who, after going to school for years and years, remained unable to read a word. The student knowing something was not connecting, something was not clicking, and the student feeling that he/she was not whole or completed. Heidegger (1977), speaks of this as *becoming*, the “something from out of itself, is a bringing forth, poises” (p. 10). The student was not able “to become” with the act of reading instead remained “concealed” as the act was a very frustrating, difficult and labored process. Having the desire to read but also suffering from “word blindness” and appearing one way (normal) but being another (a non-reader). This created a crisis and dilemma in the parent, the student, the teacher and in the doctors who are trying to figure out how and why the student could not read. These were some problems of early school psychologists trying to solve the why and correct the problem.

Research was initially conducted in Europe and moved to the United States after the turn of the century (Hallahan & Mercer, 2001). A specific learning disability was originally thought

to be a visual disorder as early writings included reports by Berlin, who was from Germany, and coined the term “dyslexia” or Morgan, from England, who introduced the term “word blindness”. Hinshelwood, from France, was credited with hypothesizing the brain region affected was just behind the Wernecki area (Hallahan & Mercer, 2001; Opp, 1994; Snowling, 1996).

Reports of cases were published and the disorder was hypothesized by the medical field as having a congenital and neurologic basis around the language region. Some patients were cared for in hospitals. One hospital, Harperbury Hospital in Middlesex County, United Kingdom recorded caring for 8 male patients who were classified as “high grade feeble minded” in October 1925 (“Harperbury Hospital”, n.d.). At the time, they were thought of functioning as a sort of higher grade of mental retardation in many ways and yet researchers also discussed the apparent normal intelligence of these students. This account speaks to the confusion around understanding differing disabilities and the singular approach to handling special education needs of that time. The students were treated as retarded when they may have been learning disabled.

Studies in the United States after the 1920’s included looking at remedial techniques to help these “word blind” students and also at better ways to identify these students with atypical reading difficulties. Fernald, Monroe and Kirk all advanced the corpus of knowledge and the educational pedagogies by trying different approaches to instructing reading and helping these students. Grace Fernald in 1921 advocated for multisensory multimodal instructional approach which came to be known by the VAKT acronym for visual, auditory, kinesthetic and tactile instruction. Her method known as the *Fernald method* was used with all types of poor readers, writers and spellers (Fagan & Warden, 1996). Marion Monroe (1932) spearheaded the phonics approach to reading remediation as well as being the first to use the discrepancy model to

determine unexpected underachievement in reading. Samuel Kirk in the 1930's was able to show reading and learning success by using a combination of approaches towards instruction of the word blind (Hallahan & Mercer, 2001).

As Fagan (1990) termed it, pedagogical specializations were determined through an increase and acceptance in testing. "The early years of the testing movement demonstrated the advantage of ability and achievement tests in segregating individuals for specialized treatment. World War I had a major influence on the development of standardized tests and their public acceptance" (p. 917). Mass assessment became accepted and a popular method to determine if students needed or did not need specific educational treatments.

The great depression signaled change economically in the United States and ushered in the largest governmental increase in fiscal control and spending up to that time for the country. Roosevelt ushered in the New Deal which expanded government into the social and economic arenas. The focus of the bills had an indirect influence on education but had a direct influence on the psyche of America. It bolstered confidence in the banking system with the creation of a deposit insurance (FDIC) and as well laid the ground work for the stock trading oversight (SEC) and public works program (welfare). However, it took until the 1940's and World War II to bring the country out of the depressive state (Armstrong, 2004).

Economic and Behavioral Influences on Roles

Around this period the social progressive movement focused on anti-capitalistic themes with the bitter taste of the stock markets still on their tongues. Kliebard (2004) noted that progressive educators advocated for more social and equitable interests for all school children. One common example of social advocacy was seen in a brief note (see Figure 1) as Pierce Elementary School in the Chicago school district reflected an appeal by the school principal for

contributions of money for the school's children in that district of my mother's school at that time. Monetary drives for different charitable causes are commonplace in schools across the country today.

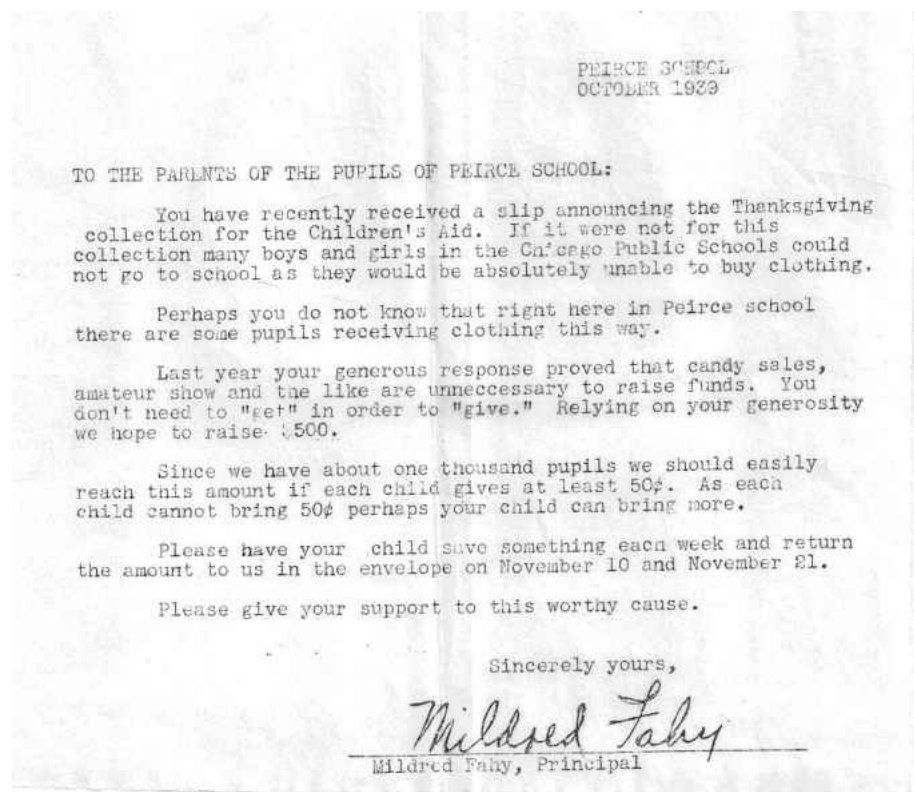


Figure 1. Pierce Elementary School Principal's Letter of Appeal, October 1939

Curriculum focus drew from educational leaders such as Dewey, Counts and Cobb. John Dewey studied under G. Stanley Hall at Johns Hopkins University. He was a psychologist, curriculum theorist, and progressive educator. Dewey was well known for his educational experimentation in curriculum, association with the progressive education movement and the laboratory school at the University of Chicago. George Counts, professor from the University of Chicago, was an early curriculum analyst and investigator, who studied methods of instruction. He was a pioneer of curriculum analysis comparing school curriculums across the country. He was instrumental in starting a national experimental school movement which later became the

Progressive Education Association. Stanwood Cobb also helped start an experimental school and became a curriculum reformer. He promoted and developed school programs which focused on social change through the English, Social Studies and Vocational tracks in school curriculum (Kliebard, 2004; Reed & Johnson, 2000). The hope for the country's children and the direction of society through education was led by the examples of these leaders in the school movement in the 1920's and 1930's. It caused many in the country to gain optimism for the future generations. It was around this time period that psychologists also began to experiment with behavior techniques and study behavior in part due to the social focus for children and behavioral emphasis in society.

Behavior techniques were employed by school psychologists and borrowed from another area of psychology, Behaviorism. The ideas of Thorndike's associationism were a precursor but behaviorism's roots were in Pavlov's animal conditioning research and experimentation. John Watson in the 1910's and later B.F. Skinner in the 1930's promoted behavioral conditioning of animals to respond in specific ways when presented certain stimuli. Pavlov's work occurred in Russia while he worked as a researcher and physiologist. He conducted experiments on the conditioning of animals to specific objects, sights or sound presented (Herrnstein & Boring, 1965). Watson and Skinner extended Pavlov's experiments, expanding experimental research towards human behaviors. The theoretic foundations purported exclusion of the mind and consciousness in theory when measuring behavioral response and only address discrete behaviors. Watson was considered the father of behaviorism in the United States (Herrnstein & Boring, 1965). While school psychologists may embrace the behavioral techniques to promote change in the school setting, they did not necessarily adhere to the theoretical bases espoused by early behaviorists.

Behaviorism, or at least behavioral types of principles, found its way into the classroom curriculum in the 1940's with educator and curriculum theorist Ralph Tyler. Tyler used Bobbitt's foundation of "task analysis" and espoused that curriculum should be planned out in specific detail (tasks) and the learning measured by objectives and changes in the child's behavior. A student's behavior was considered important because of the social focus of curriculum at that time. Student's learning was measured by behavior as well as social and gender roles fulfilled. Tyler's curriculum scripting rationale was common-sensical sounding. It promised to eliminate any wasted energy and was modeled after the industrial and measurable scientific paradigms (Kliebard, 2004; Thorndike, 1912, 1914). This sequenced, segmented and scripted curriculum method developed became known as the *Tyler rationale* and has been a driving force in curriculum. Its focus has been on the *how* of instruction.

The Tyler Rationale put teaching and education under the "scientific" instructional lens called objectives. It called for teaching to change behavior and the behavior would be measured for change by these objectives written and followed by teachers across the country.

The idea that, in curriculum development, exact specifications ought to be drawn up in advance and that success would be measured in terms of the extent to which those blueprints were followed is derived from the root metaphor of social efficiency, production, by which educational products are manufactured by the school-factory according to the particulars demanded by a modern industrial society. (Kleibard, 2004, p. 185)

This efficiency and scientifically rooted pedagogy has become entrenched in schools and is still used today under No Child Left Behind (2001). Instead of management by objectives used by businesses, education became instruction by objectives for educators today with the fluid

thinking in the classrooms vanished. Instead of free form curriculum and instruction in the classroom, teachers are plodding along *objectives* paths. Curriculum theorists describe this phenomenon as “anti-intellectual” as critical thinking is stifled and the knowledge which is passed along from one generation to the next is reified in the lessons of the day (Apple & Buras, 2006; Pinar, 2004; Purpel, 2005).

The marginalization of curriculum theory in American teacher education is, in part, a reflection of the anti-intellectual vocationalism of mainstream teacher education. Too often teacher educators have colluded in preparing teachers to accept their positions of gracious submission in the school. While victims of anti-intellectualism in government, in the university... and of anti-intellectualism in the culture at large, the field of education too, has embedded within it destructive anti-intellectual tendencies, in large part due to these external influences. (Pinar, 2004, p. 165)

Pinar (2004) criticized the teacher training programs which unconsciously or consciously were indoctrinating the neophyte teacher to follow the lead of the system and not to critically ask questions. This message was also instilled by the universities across the country, the political system and within the public at large.

Ruptures occurred in the fabric of society across the country with the racial turmoil in the 1950's and 1960's and wars which wore on society creating turmoils and prompted voices of those who might normally have been silent in “gracious submission”. The earlier hereditarians and eugenicists had provided data for entrenching racial stereotypes. They purported intelligence differences by race and ethnicity in the 1930's. However, by the 1950's these ideas were met by others in the field who had challenged the theory and research. The data was identified as non

supportive of the earlier conclusions for racial inferiority theory as noted "...the Army Mental tests, ...data did not support the argument for black inferiority since the Northern blacks scored better than the Southern whites" (Barkan, 1992, p. 94). This was the context in which questions were asked of the directions being taken at that time in education, politics and society. Brown versus Board of Education in 1954 was a major shift for American society as the dismantling of segregation and the racial integration of America began. School psychologists, as a part of the educational system, were trying to clarify their training, roles and practice with the first national meeting, the Thayer conference (Fagan & Wise, 2004).

Hegemonic Influences

Curriculum in the schools was a fluid and diverse entity as American education developed and matured from the 1900's to the 1950's. This curriculum flux had a ripple effect on roles and areas of service for all students by school psychologists within the educational realm including the mental, social, emotional and behavioral aspects. To better understand the effect on the role of school psychologists spanning various periods of curricular transition and legislative shifts, I will briefly point out some key periods in history which highlighted marginalized groups in society. Kliebard (2004) noted in *The Struggle for the American Curriculum* many of the general ideologies that impacted the American curriculum in the first half of the century. He peripherally addressed the psychological aspects of influence within the curriculum which I have attempted to elucidate in more detail in this review of the early "school" psychology field as a movement towards a scientific education.

Kliebard's (2004) focus detailed the primary periods of influence by the differing social ideologies, educational influences, and philosophical posits of the time. The primary influential theoretical movements, according to Kliebard, included the humanists, developmentalists, social

efficiency and the social meliorist movements. These curricular struggles, between differing ideologues and factions, took a centralistic turn in 1958 when the federal government became involved with education on a national level. The government has been clear that each state has rights in establishing educational goals.

Education is primarily a State and local responsibility in the United States. It is States and communities, as well as public and private organizations of all kinds, that establish schools and colleges, develop curricula, and determine requirements for enrollment and graduation. (“Ed.gov”, 2009)

Life in America and the education of its children changed on October 5, 1957 towards a nationalistic direction. American politics, military and education were awakened by the ominous beeping of Sputnik, the first satellite in space, heard from overhead on radios around the world and across the continental United States. Sputnik had been launched unexpectedly by the Soviet Union and heralded around the world as a landmark in space exploration and earth orbit. “Such adoration of science, its deification, probably reached its height of influence in the early 1960’s shortly after Sputnik and just at the beginning of the curriculum reform movement” (Doll, 1993, p. 2).

Sputnik’s launch and orbiting led to discussion and criticism of American education on a national level. Critics perceived a weak educational system nationally, and schools quickly got the blame for the believed failures of the country’s loss of prestige in scientific achievement (Kliebard, 2004). There was felt a new militaristic threat from abroad. In less than a year, September 2, 1958, Congress passed the *National Defense Education Act* which led to a nationalistic role for curriculum focus in every school in the nation. Special attention was given to improving math and science curriculum and instruction. This curricular shift and

governmental control of the subaltern is still very evident some 50 years later (Apple & Buras, 2006).

The mid 20th century in America had many strictures at that time politically, socially and educationally. Doll (1993) noted curriculum reform began around this time. The launch of Sputnik had put America on edge and set the course for the American curriculum with increased impetus in science and math. Congress worried about the direction of the country, including falling behind the Russians in space exploration, developing a new means of protecting the country and in advancing potentials to respond militaristically. Reforms during this time included politically and socially marginalized peoples. The scourge of Plessey began crumbling in the 1950's. The Plessey decision had entrenched the inequities for the black population in America despite the *Emancipation Proclamation* during the civil war.

The Plessey decision provided continued systematic unequal treatment of blacks since 1896. Ironically, the results of this legal decision was opposite of what had been hoped by those who had instigated it. Homer Plessey, a black New Orleans professional, was arrested after refusing to ride in a separate train car for blacks as mandated by the 1890 *Louisiana Separate Car Act*. An activist group devised this "planned" arrest in hopes of fighting and overturning this debasing treatment in court. The arguments of their lawyer invoked the 14th amendment for equal protection and the 13th amendment for applying rudiments of slavery. The legal case went from state court to the United States Supreme Court with *Plessey versus Ferguson* being decided by majority decision in 1896 (Zimmerman, 1997). This court decision sealed the fate for the treatment and social separation of blacks by states and locales for decades to come.

Race theory and disputations revolving around the deterministic measurements of IQ, coupled with the curriculum reform, provided some movement on a national attitude for

Americans (Barkan, 1992; Doll, 1993). The national attitude of racial separation also began to change with the sway of the manpower strain during World War II. America, caught up in the biggest war to date, began to see that all men (and women) were needed in this great struggle. The war also allowed for an equalization and integration of the races, exposing each one to the other, and providing a dawning of awareness for each soldier, sailor, airman or marine. Each race appreciated the freedoms of the United States and knew that, despite different exteriors, the liquid life force consisted of but one color, blood red. Out of this great struggle, inching forward, the status of the Blacks, Hispanics, Asians and Native Americans improved (Takaki, 1993).

There had been the passage of the 15th, 19th and 24th amendments to the Constitution by Congress which gave voting rights and equalized the political playing field for women, blacks, and other minorities within the society. Additionally, the judicial branch held sway over states actions with passage of *Brown versus the Board of Education* in 1954, which overturned the 1896 Plessy decision and called for the integration of schools. The *Civil Rights Act* of 1964 overturned many of the other segregation laws (beyond school) which still existed in the United States. Slowly, the role of government and governmental power increased in local society as the courts and its transformative laws began to impose equalized treatment of all citizens.

When the *Brown versus Board of Education* legislation was passed, it reflected the growing sentiment of a need for change in the population. Rosa Parks, Martin Luther King Jr. and others began to rethink their social station in life and dared to reach for more despite cultural reifications of the time. The federal government acted on behalf of the citizen over the state and the system in which an individual resides. The *Civil Rights Act* of 1964 created the Equal Employment Opportunity Commission and invalidated the Jim Crow laws which ruled the day in many southern states. Another avenue of the government's agency, which moved into state and

local territories to create change, was the threat of withholding federal funds for schools or systems which practiced segregation (“LBJ Museum”, n.d.). In these cases, the judicial actions were positive steps towards equalizing the social and education systems for all races.

Another equalization law was born on April 11, 1965, a Sunday afternoon, when President Johnson, sitting next to his first schoolhouse teacher signed into law the *Elementary and Secondary Education Act* (ESEA) (“LBJ Museum”, n.d.). This act held hope for poor children and inner city children as a means of providing more funding for those in low socio-economic status areas which met criteria. It specifically targeted high poverty rate areas in urban and rural areas and indirectly helped minority populations such as Native American children. The ESEA bill was actually an amendment to an earlier “high impact” bill which had provided funds to local areas which had been impacted by military bases resulting in the loss of tax revenue from those areas. The ESEA is reauthorized for funding periodically and has grown substantially since its beginnings. The largest block of funding from the ESEA is through Title 1 which focuses on economically disadvantaged children (Cunningham & Cordeiro, 2006).

Large scale changes in society take time and school psychologists were caught up in them. Kliebard (2004) noted that this was a time of centralization in education across the country. The earlier forces of curricular change now fell under legislative agendas, with regard to the military and space, race and society, as well as towards the economy.

It would appear that in the first half of the 20th century, school psychologists’ roles, and areas of influence within the educational realm, evolved from early theory and experimentation through clinics within and outside of schools. Early school psychology focus was on child development, education and curriculum. Early school psychology roles included assessment and testing of educational levels and mental ability, creating and interpreting behavior and social

norms within school and society. Indeed the school psychologists' training and education was connected under the umbrella of applied psychology, child development and learning, and educational systems and school functions. The mix of differently-trained psychologists drew from the skills areas mentioned above. The hybridized field of school psychology was slowly coalescing under these broad commonalities. One of the ways which school psychologists began to form more common role development, training standards and functions within the schools was through state and national associations (Fagan, 1990).

Organizational and Legislative Influences on Roles and Functions

While the American Psychological Association (APA) was an initial representative body for psychologists at large in the early 1900's, the APA began to segregate within professional fields and formed various specialized divisions within the APA. Fagan (1990) noted that the APA division for the field of school psychology was slow to develop and grow. The APA division 16 was not created for the school psychology area until 1945 and had approximately 100 members. In the first half of the 20th century, each of the leaders in the "school" psychology field that held influence became specialists and experts in a specific domain (e.g. assessment, learning, behavior, development, disability). It was these specialty areas that allowed for the school psychologists of the second half of the century to move towards a coalescence of *skills*, *education* and *training* to become modernized professionals in the educational field and known as "school psychologists". This trifecta coalescence also moved the field in the direction of what Fagan and Wise (1994) termed the "thoroughbred years."

One of the central ways that associations helped the field was to give standardization to training and practice through the universities on a national scale. While state associations provided a locale of uniform practice, the APA and later the National Association of School

Psychologists (NASP) provided a national avenue for training, credentialing and practice implications (Fagan, 1990). The APA was reported as helping slowly grow programs from the 1950's to 1970 from a few school psychology training programs to over 100 across the country (Bennett, 1970). However, NASP became the dominant representative for school psychologists nationally in the mid 1970's and today has over 20,000 members. Meanwhile only about 2% of the APA represents school psychologists (French, 1992; Cowan, 2008). The migration from APA towards NASP was partly because of the educational level of school psychologists (majority non –doctoral) as well as the unique and exclusive representation by NASP versus being one of a minority divisions within the larger organization of APA (Fagan, 1990).

In the late 1950's and early 1960's the school psychologists' roles were solidifying into the more modern roles of today. The assessment role was unquestionably the dominant role for most school psychologists over the 20th century. The instruments used such as the Binet for intelligence testing (and in the 1940's the Wechsler) and the Bender Visual Motor Gestalt Test had become generally accepted tools of the trade for school psychologists when assessing students thus reducing the experimental or "testing promoter" roles as when the field was first emerging. The Thayer Conference, an early national symposium on school psychology, held by the APA in 1954, ensured from that time onward assessment was to become one of the school psychologist's primary service roles as it provided guidance on training, certification and practice (Cutts, 1955). White and Harris (1961) described the functions of the school psychologist in a variety of different settings. The school psychologist's environments ranged from rural to urban school settings and from school-based services of a school psychologist in one school or a few schools, to the medical psychological-pedagogic centers which may be similar to psycho-educational centers of today. While school systems had school psychologists,

the numbers available were scarce. Fagan (1990) noted that at this period the students and schools still had very limited access to a school psychologist. He noted the student to psychologist ratio was 1:36,000 in 1950 and approximately 1:10,500 in 1966.

In the late 1950's, school psychologists may have worked in one of a variety of possible settings including a single school system, an educational cooperative, a large metropolitan group, a state agency or a rural region. Assessment may have occurred individually or in groups and it continued to be a primary component of the job. School psychologists were tasked to measure the student's intelligence as well as determine areas of strengths and weaknesses, and based on the results, provide remediations. Personality diagnosis was another role of the psychologist at this time. The psychologist may have used observation, interview, historical accounting, assessment and other means to determine personality traits which were helping and hindering the student in school and provide remediation for what was deemed personality weaknesses (White & Harris, 1961).

After 1958, the federal government increased influence on educators including the general roles and functions of school psychologists through funding of special education and mental health initiatives. Fagan (1990) noted that the 1940 to 1970 period in the field was "noteworthy for role confusion..." (p. 919). However, focus on roles increased in the 1970's as the number of school psychologists increased and the field became more standardized. Many studies of the school psychologist's role and practice raised questions about what school psychologists were doing. These studies attempted to measure what school psychologists' roles were in the schools, their level of training and how they were perceived by other school faculty (Bennett, 1970; Gilmore & Chandy, 1973; Meacham & Peckham, 1978; Reilly, 1973; Roberts, 1970). These studies affirmed that the assessment role had been fixed for the better part of 70

years. The roles of participating as consultant and a leader in special education were also reinforced by states and federal funding. This was especially the case after passage of Public Law 94-142, *Education for All Handicapped Children Act* in 1975. This law was implemented nationally on what was an albeit variation of the outgrowth and vast expansion of what H.H. Goddard had promoted on the state level in New Jersey in the 1910's (Zenderland, 2001).

Coalescence of the Field - Thoroughbred Roles, Service Models and Training

Gilmore and Chandy (1973) discussed that school psychologists in the 1970's had roles which were self determining in many ways but also had roles which were bounded by the authorities within the schools, state departments, university training and administration. Reilly (1973) narrowed his focus of study towards 6 broadly implemented models in which psychologists fulfill roles in the schools. These models included clinical-medical, psycho-educational, educational programmer, data-oriented problem solver, social facilitation and preventative mental health care approach. One can see from the titles that each of these models differed greatly in skill set, techniques employed and approaches to understanding and solving the problems in schools.

Bennett (1970) reported that the school psychology field, in its service to the schools and the variance of skills required to meet the school needs, suggested that a broad experience base and training was required. She noted that emphasis areas included clinical, research, learning and consultative foundations in order to meet the challenges facing them. Reilly (1973) suggested that the focus should be on the schools' needs, which were based on educational goals, and the school psychologists' roles would be derived from this. This position included the assumption that broader training would be better to allow more flexibility and role adaptation in the different school settings.

Later studies, involving the roles and functions of school psychologists, have noted the wide ranging roles, skills and training needed to fill all the roles, expectations and needs encountered by the school psychologist (McAfee, 1988; Meacham & Peckham, 1978). Solidification of certain broad practice strands have occurred in part due to the national guidance and standards first set up in 1984 by the National Association of School Psychologists (NASP) which developed a training, role and practice guide for school psychologists nationally and under the APA university training accreditation which began in 1971 (Fagan & Wise, 2007; Ysseldyke, Reynolds & Weinberg, 1984).

Standardization of training was questioned in the 1970's. Bennett (1970) reported that standardized training was lacking and varied by states depending on certification requirements. The training and level of education of the school psychologist invariability influenced relevancy towards positive outcomes to the students and the schools. She indicated that perceived uniformity of roles and functions may not necessarily indicate uniformity of service as may have been expected. Her experiences with wide role variability and the lack of school continuity for school psychologists may have rendered the idealized uniform services irrelevant to the school or the child. Her hypothesis on the limitations of a standardized curriculum for school psychologists certainly parallels the posits of Pinar (2004) warning against a national curriculum, Purpel (2005) against the hegemonic influences and Apple (1995, 2001) on the deskilling of the worker under the influence of the corporation.

In the late 1970's NASP moved to help organize and standardize the practices and roles of school psychologists across the country. NASP worked with the APA in 1977 on *Standards for the Practice of Psychology* including developed agreements on licensure and indirectly on credentialing and use of the title "school psychologist" in the schools. The APA agreed with

NASP that non-doctoral (educational specialist) trained psychologists could use the title “School Psychologist” when certified by the state. The APA reaffirmed this title exception agreement in 1987 (French, 1992). The APA, as a larger organization, also recommended movement towards requiring school psychologists obtain a doctoral-only standing in the future. This suggested educational level standard has recently caused tension in the field, as the majority of representative school psychologists hold educational specialist level training are the majority of practitioners in the schools and are members of NASP (Hosp & Reschly, 2002; Meacham & Peckham, 1978; Smith, 1984). Most recently, the APA has agreed to keep the title exemption for school psychologists in place with a renewal of their licensure provisions (P. Harrison, personal communication, February 20, 2010). For now, the issue of degree held, title and practice has been again settled. French (1992), who examined the history of the APA on school psychology, expressed hope that the associations would become federations and, as such, could blend NASP and the APA together for the greater good of psychology and better practices for children.

In 1984, NASP began promotion of concise guidance towards graduate training standards and school psychology roles and practice through the development of the publication *Handbook for School Psychology: A Blueprint for Training and Practice* (Ysseldyke et al., 1984). There have been three editions of *Blueprint* with the first being born from the Spring Hill Symposium in 1984 at the University of Minnesota, sponsored by NASP, and partially funded by the Office of Special Education (Lindborg & Egeland, 1987). This national symposium was the first large meeting since the earlier Thayer conference of 1954. It focused on future areas and training for school psychology as a field. The original *Blueprint* had 16 domains which were specific and narrow in definition. The second edition, known as *Blueprint II*, was published in 1997. This publication laid out school psychologists’ proficiencies in training and practice. The domain

areas were collapsed into 10 areas by combining and broadening. One example is the deletion of assessment as a major domain and placing those skills under the broader data based decision making domain in *Blueprint II*. While the purported purpose of *Blueprint II* was to stimulate discussion, it may have, in many ways, helped nationalize and standardize role and practice change.

Another NASP initiative which influenced training for the school psychologists across the country is the national board certification system which began in 1988. It has also influenced many university school psychology training programs and certification recognition by states across the country. By standardizing the training, roles and practice many states began to recognize the NCSP as an accepted national standard and granted reciprocity or acceptance of those holding the NCSP to work in their school systems. The NCSP began to function as an alternative for state specific certification requirements. Many school psychology university training programs across the country attempted to align training and curriculum to address the NCSP content areas and gain NCSP approved status. Currently 46 state public and private universities and institutions have NASP NCSP approval for graduate programs (NASP, 2010).

Special Legislation

Criticisms of special education are rooted in theory, law and practice and have swirled around the school psychologist who has been involved in this educational area since its inception in the late 1800's and early 1900's (Barkan, 1992; Gould, 1981; Lewontin et al., 1984; Reschly, 1988; Reschly, Kicklighter & McKee, 1988). As mentioned earlier, Goddard wanted and promoted special education services on the state level (New Jersey) since 1910 but it was not until the 1960's that federally coordinated education for special populations was passed in the legislature (Zenderland, 2001).

Public education has been in a constant ebb and flow in the United States as the corpus of knowledge about educational needs expanded. Historically, special education services, in the early to middle 1900's, were isolated and separate from the "normal" school population. However, in the late 1960's and early 1970's, there was a public drive, and consequentially, a legislative impetus for what was called *mainstreaming* of the mentally retarded and other special needs students into regular school (Kirk, Gallagher & Anastasiow, 1993). This push would financially tax the schools and states to accomplish.

Coincidentally, it was around this time that groups promoted *deinstitutionalizing* the mentally ill who were hospitalized in state settings and was the aftermath of desegregation for the blacks and Native American populations. Ng-A-Fook (2007) chronicled the United Houma Nation, a tribe from the Louisiana area, trying to access public education. "Houma students did not gain access to equitably funded schools until the 1960's" (p. 133). This was true of most marginalized groups in public schools at that time and evidenced by changing policies for Blacks in the Civil Rights Act of 1964 and for the poor in the Elementary and Secondary Education Act (ESEA) of 1965.

The handicapped students' time came in 1975 when Public Law 94-142, *The Education for All Handicapped Children Act*, aggregated several isolated laws covering different parts of special education conditions including the learning disabled, mentally retarded and other conditions which had separate legislative bills attached in the 1960's (Kirk et al., 1993). It was during this time of new funding under Public Law 94-142 that university training programs burgeoned, and the numbers of school psychologists increased greatly (Fagan, 1990). Public Law 94-142 allowed schools to place and serve the students who needed this specialized help. It also mandated a free and appropriate education for handicapped students. It gave specific rights and

voice for special education populations. It also provided the much needed dollars for additional educational support (“Ed Performance & Accountability”, 2007). This would be the language that would allow the marginalized population to begin to have access and a voice in the regular education curriculum and later to the regular education classroom.

Public Law 94-142 created federal funding available for states use for students with disabilities and, like other appropriation bills, has to be reauthorized periodically to re-appropriate adequate funding levels for states. Often times these reauthorizations give Congress the latitude and opportunity to make changes in education. These reauthorizations have also typically blown with the winds of the time politically and have resulted in name changes: *political zeitgeist*. Despite the tidal swells for mainstreaming special needs students, the special education system has remained, for the most part, a separate system (Reschly, 1988). Indeed, Reschly noted that criticisms of the newly created system appeared almost as quickly as the 1975 Public Law 94-142 appeared. Legal challenges occurred in California with *Larry P. versus Riles* in 1979 which targeted the inappropriate use of IQ tests with minorities and in Georgia with *Marshall versus Georgia* in 1984 which targeted overrepresentation of minorities in mentally handicapped classes. In these lawsuits, the placement mechanisms were challenged and this included the school psychology services (and roles) and those instruments used including the intelligence test (Reschly et al., 1988).

Public Law 94-142 was renamed in 1990 from *Education for All Handicapped Children Act* (EHA) to *Individuals with Disabilities Education Act* (IDEA). The original intent for EHA was to provide states with 40% federal funding for the services offered through special education. This 40% federal funding became known as “full funding” to the states. However, this promise by Congress has never been fulfilled. Therefore, it has been left up to the states to fulfill

the mandates of IDEA without the promised “full support” from the federal funding stream. This has placed a fiduciary burden on the states and compelled the school systems and states to be continually fiscally focused (Kirk et al., 1993). Funding constraints have influenced the undercurrent for services design criticisms as well as justifications for changing the system.

Reschly (1988) summarized in his study the criticisms that had been building within the educational arena towards special education. The special education model including identification, placement, service and funding was seen by many educators as broken. He cited the litigations of *Larry P versus Riles* and *Marshall versus Georgia* as stigmatizing to students. He also cited the type of services provided to special education students as separate from regular education curriculum despite most students in those special classes being diagnosed as “mildly handicapped”.

The major characteristics of the mildly handicapped are well known;... (a) serious academic problems,... (b) no physical symptoms or evidence of biologic anomalies, ... (c) nearly all classified only after attending school... most are not classified... as adults, (d) classroom achievement problems and teacher referral... most important steps in diagnosis,... (e) additional difficulties with social skills...
(p. 460)

The psychologists’ primary role of assessment within the school helped contribute to these now criticized and perceived problems with special education identification, placement and services for students. It was under challenge and attack by the legal system. Moreover, Reschly noted the high expenses associated with the special education model being separate for regular education and the broad majority (90%) of those served under it being classified only as “mildly handicapped.” Thus Reschly became a harbinger of change for the special education system as a

whole and as well for the established roles for school psychologists with assessment and their exclusive connection with special education.

The question of who does, and who does not, need the services and support of a specialized education program has been a pervasive theme over the course of the last 100 years. Binet attempted to devise a way of accurately answering the question and after him the answer became a reified panacea of IQ and assessment. This question of who is in need of and who qualifies for special education services and support has also expanded as the field's understanding has grown and as the legal definitions changed. Medical conditions, syndromes, learning problems, emotional difficulties, physical difficulties, developmental concerns, and formulated definitions all have an impact upon how students will learn over the course of their educational career and may also influence whether a student experiencing a problem may get extra support (special education services). This growing corpus of knowledge has influenced the roles and functions of school psychologists who are tasked to help educators answer the difficult and often ambiguous questions and circumstances surrounding particular students with problems in education (Kirk et al., 1993).

Who are the stake holders in making these critical decisions for students? Apple and Buras (2006) addressed this same question with regard to the knowledge embedded in the curriculum taught today by "...critically examining... vision of education and the ways in which ... guiding assumptions appeal to unequally empowering groups" (p. 43). The special needs students are often those on the losing side of unequally empowered groups. Disabled students and inexperienced parents lose voice or never had a voice to begin with. One of the school psychologist's role and function is child advocate as has been tradition beginning with James, Hall, Witmer, and Dewey.

Anything involving funding and legislation for schools could have potential impact on the roles and function on a variety of positions in the schools including school psychologists. Criticisms of education have not been in short supply. Two examples are the *A Nation at Risk Report* (ANAR) and *Goals 2000*. In 1983 the *A Nation at Risk* report commissioned by President Reagan came out. In 1994 the piece of legislation known as *Goals 2000* under President Clinton was unveiled. These two politically stamped works, while unfunded, seemingly laid the ground work for legislation under the President G.W. Bush era in *No Child Left Behind* (NCLB) 2001 and the reauthorized IDEA in 2004.

The second sentence of the ANAR report linked education with capitalistic competition. “Our once unchallenged preeminence in commerce, industry, science and technological innovation is being over taken by competitors...” (Gardner, Larson, Baker & Campbell, 1983, p. 5). The nation was at risk of losing a competitive edge on the capitalist front. The terminology was couched in language involving militaristic threat, “If an unfriendly foreign power...” (Gardner et al., 1983, p. 5). School psychologists were caught up in the turbulence of the times. ANAR, with a broad brush, was painting the school system as the problem and as the way to a solution. School reform and educational reform included school psychologists and an impetus for action, as change agents, by the field of school psychology (Talley, 1995).

The ANAR report’s language included terms like competitor, workplace, workforce, prosperity, competition, raw material and economy. This production-oriented language strengthened the linkage between school/education and work/prosperity and solidified the goals of education for service to the nation (Gardner et al., 1983). ANAR seemed to be blaming the schools for the ills of America in similar fashion to what happened to the schools in 1957 when the citizens of the United States heard Sputnik was orbiting the Earth. The government report

was trying to solve (or at least point the finger) at what was perceived to be a threat to the United States and the weaknesses of the schools with another national educational agenda (Purpel, 2005). Similar to Kliebard's posits, the school was seen as a medium for social and political change once again but from the impetus of government rather than movements from within society.

The Clinton Administration promoted and passed Goals 2000 known as the *Educate America Act*. This funding initiative was relatively little known and small in comparison to other types of educational programs but surprisingly much of the language was similar to the NCLB initiative introduced under President Bush. Goals 2000 provided for voluntary accountability in grades 4, 8 and 12, raised training standards for teachers, encouraged parent participation and set lofty goals for the Kindergarten to 12th grade education across the country. These legislative initiatives were similar to NCLB but without any established accountability (voluntary for schools) and did not have the funding incentives of NCLB (Paris, 1994). However, this legislation presaged what the Congress endeavored to do with the education system under NCLB and the latest reauthorization of IDEA in 2004. Goals 2000 and ANAR were examples of the government influencing education across the country through a report first and then through a voluntary legislative grant. The intent was seemingly to influence the education process in specific directions. School psychologists' roles were not changed directly at this point in role or function. However, further educational control and systemic change was foreshadowed in these legislative initiatives.

Thoroughbred Field and Role Research

School psychology as a field grew significantly in size after 1975 as a result of Public Law 94-142 (Lowry, 1998). The positions and demand for school psychologists in public schools

increased during this time of legislative activity. Challenges to the status quo roles for school psychologists (assessment and testing) were also increasing as criticisms were raised and possibilities for expanding roles were introduced (Curtis et al., 2004; Hosp & Reschly, 2002; Reschly, 1988; Roberts & Rust, 1992, Trachtman, 1981).

Early large scale national studies involving school psychology practice were conducted. One was Meacham's and Peckham's (1978) research which examined congruence between training, practice and preferred roles in the field. Their study implicated a variety of skill sets being produced out of the 203 training programs across the country at that time. Diversity in skills and roles were negatively implicated in the research. Their study sampled the APA Division 16 membership for the prevalence and preference of six primary role areas as practicing school psychologists. These areas included assessment, remediation, interpretation, consulting, change agent and research. Among these roles, assessment was reported as the predominant role in the calculated and obtained rank ordering. The descending order of predominance for roles reported by school psychologists to Meacham and Peckham was assessment, then consultation, then interpretation, then remediation and finally change agent and research.

Trachtman (1981) wrote a challenging editorial called, *On Such a Full Sea*, which summarized the state of the field in the late 1970's and early 1980's on the heels of the newly promoted EHA of 1975. A charter member of the American Board of Professional Psychology in the school psychology area, Trachtman critiqued the problems seen with current roles and encouraged change for the future of the field. He warned of reification in the assessment role which he described as "psychometric robots" (p. 150). He called for collaboration with other educational stakeholders and for nondiscriminatory assessments. Trachtman was aware at that time of the plethora of federal funding and the neophyte special education program. However, he

called for a balanced approach and for thoughtful expansion of role potential for school psychologists around the country echoing aspects of role potentiality from the earlier national study by Meacham and Peckham (1978) as well as expanding the vision for the field's future.

Another large national study conducted by Smith (1984) sampled school psychologists across the country using listings from the State Boards of Education, if available, or State Associations or NASP membership rolls for each state if nothing else was available. Smith's study examined practice trends by regions across the country as well as national practice trends. The professional activities he measured were very close to what NASP (1992) defined as standards of roles and practice. The roles measured by Smith (1984) included assessment, intervention, consultation and research. Nationally, he found that school psychologists, on average, spent 54% of their time engaged in assessment roles and 23% of the time was spent on intervention activities. He noted that consultation was reported to be 19% of the school psychologist's duties and only 1% of their time spent on research activities. The percentage of time spent in each of the roles varied by region with significant differences being reported between the five regions. The South East region, which included Georgia, had the highest reported amount of time spent in the assessment role with 62.65% of the school psychologist's time in assessment activities.

Four short years later, Reschly (1988) discussed abandoning traditional test-and-place roles and largely replacing them with preventative roles for children with learning problems. He summarized the criticisms for special education problems as primarily failing students and argued that the focus needed to be on the "other end" of education in prevention and intervention. McAfee (1988) attempted to qualify roles in Georgia, either held or perceived to be held, by school psychologists around the state at that time by the administration and other leaders

within school settings including principals, instructional supervisors, counselors and school psychologists. Her study narrowed the roles to 10 primary expected roles which were more discrete and specific rather than what NASP (1992) or Smith's (1984) study had espoused in broader role domains. Several of her discrete roles included the aspects of role function revolving around assessment including testing, report writing, eligibility completion and special education liaison. However, her study also provided for implications in working with other leadership within the schools, suggesting and warning of the importance of collaboration within the schools.

Roberts and Rust (1992) compared the traditional assessment role for school psychologists in Tennessee (as tester and gatekeeper to special education) with the newly implemented intervention and prevention roles for school psychologists in Iowa (role focus on remediation in general education). Their comparative study, between these two state models, suggested an alternative service model for school psychologists. It operationalized what had been theoretically addressed by Trachtman (1981) and Reschly (1988), from the traditional assess-diagnose-place paradigm, which had become entrenched in the field, to a prevention and remediation-based approach through regular education. Their study suggested potential satisfaction, as actual roles moved in the direction of desired expanded roles and functions of the school psychologists in Iowa, with their de-emphasis on assessment and increased emphasis on the intervention and consultation roles in the schools.

The mantra for change in roles for school psychologists in studies conducted in the 1990's continued. Bradley-Johnson et al. (1995) were critical of the "gate keeping" role in assessments conducted by school psychologists'. They also criticized the schools' myopic perspectives of limited intervention strategies provided to students having difficulties and the

narrow singular solution of special education. Bradley-Johnson et al. also faulted the field's lack of proactive involvement by school psychologists to change their roles despite leadership's earlier encouragement to do so and the educational shift occurring in spite of school psychologists' ingrained perspectives of role and function.

Until recently there have been no consequences strong enough to cause school psychologists to attempt to change their role, despite suggestions from leaders in the field. Now, however, the educational environment is changing and producing new consequences for school psychologists that may be salient enough to bring about modification because they have grave implications for the future of the profession." (p. 196)

This was reminiscent of Trachtman's (1981) description of the perceptions of school psychologists and the disconnect with providing useful solutions to the schools. "Parents see us as gatekeepers, test-givers, henchmen of the school, and, frequently, patronizing. Teachers are alternately threatened by our "omniscience" and angered by our failure to be helpful" (pp. 171-172).

Kramer and Epps (1991) encouraged modifying training of school psychologists to include an ecological perspective, diversity and minority focus as well as family dynamics and family service models. They encouraged the expansion of school psychologist roles through additional skill building and internship experiences allowing for a shift and expansion of school psychologist roles. Stoner and Green (1992) made an argument for reintroducing an earlier role, that of scientist-practitioner, and increasing the research element in the field. Frisby (1990) impelled the field to become agents for

positive change in the schools through critical thinking and thus expanding roles for school psychologists towards becoming system-wide change agents.

Becoming change agents can be a difficult task. Willis (2000), in his phenomenological investigation using interviews from school psychologists perspectives towards their job and roles in the Detroit Public School system, reported that much of the impetus for change was limited by a lack of agency for those working in that school system. The school system's power structure and the union contracted agreements hampered any effective change efforts. This was due to the prior agreements made and the psychological services structure within those schools. The focus by the higher echelons was on assessment production (three cases per week) rather than any variation of services by the school psychologist to better service a plethora of problems other than just determining special education status. The school leadership and union negotiators' perceptions of school psychology services were limited to the traditional special education and tester roles.

Meanwhile, Short and Rosenthal (1995) studied expanding roles for school psychologists beyond the walls of schools into the non-school settings. They investigated work settings for those trained as school psychologists at the doctoral level and compared in school versus non-school (other) work settings. The study showed that most school psychologists still had some sort of a relationship to the school populations and settings through services within the schools directly (33%) or in private practice (30%) or as university faculty trainers (18%). The remainder of those surveyed (18%) reported being employed in other agency settings. This study was noteworthy that roles were also expanding beyond the school setting.

Lowry (1998) conducted a ten year follow-up research study on school psychologists practicing in Virginia and examined their work attributes in that state as an outgrowth from Public Law 94-142. She used survey data and compared her results with two earlier research study surveys spanning the prior two decades. Her study examined various aspects for school psychologists in the field including: their roles, training and other attributes in Virginia. Her results suggested an increase in the amount of education was desirable for practicing psychologists. She also noted, at that time, a movement away from the assessment role towards more direct services roles for those practicing in that state. Her research examined descriptive trends without direct data survey comparisons as the follow-up from the earlier studies carried out there.

The actual versus desired roles for school psychologists were measured in several state studies including Kimball's (1998) study of school psychologists in Georgia and DeSimone's (1999) study of what he termed "the discrepancy" between actual and desired roles for school psychologists in Florida. Kimball (1998) examined current-versus-desired roles for school psychologists practicing as reported by school psychologists and principals in the state of Georgia. Kimball reported that assessment was firmly entrenched for school psychologists. It was a primary role as seen by principals and a primary role as reported by school psychologists despite a desired role change also reported by those school psychologists. DeSimone's study also noted the majority of school psychologists time spent in Florida schools was fulfilling the role of assessment (53.7%) versus the reported preferred amount of time spent in this role reported as significantly lower (37.7%).

Kimball's (1998) study on the roles in Georgia was the first detailed study focusing on Georgia school psychologists' actual and desired roles exclusively in attempting to rank order

role dominance and desired change for the field at that time. Kimball, in preparation for his study, had developed the Georgia School Psychologists Survey (GSPS) based on the National Association of School Psychologists standards of consensus role domains for school psychology services (NASP, 1992). His survey was employed statewide to help measure actual-versus-desired roles for school psychologists in Georgia and also to compare them with actual-versus-desired role expectations as seen by principals in the state. The broad role areas included in his survey were assessment, consultation, direct services, research, and program planning and evaluation. These five domains have been consistently held as the predominant spectrum for role categories with national and state studies conducted over the past two decades for school psychologist role research (DeSimone, 1999; Hosp & Reschly, 2002; Lowry, 1998; Meacham & Peckham, 1978; Roberts & Rust, 1994; Reschly & Wilson, 1995; Smith, 1984).

Kimball's (1998) results on actual roles, in which school psychologists reported they engaged, agreed with other studies in regards to the dominance of assessment as their primary role. His research indicated that the field of school psychology in the state of Georgia reflected a desire to decrease the role dominance of assessment and increase the other four areas of service. Kimball compared actual and desired roles by the school administration (principals) and their perspectives of roles for the field of school psychology in Georgia. Interestingly, the administrator expectations for school psychologists' assessment role were contra-indicated (in the opposing direction) when compared with school psychologists' desired direction for the assessment role. The administrators desired an *increase* in assessment involvement.

Kimball (1998) also noted that the principals reported a desire for increasing involvement in the other four role domains as well. However, the areas of consultation,

direct service, research and program planning have not been traditionally dominant roles for school psychologists in Georgia. Kimball's research suggested that the leadership of the schools (principals) were agreeable at the time with role changes and increased involvement by the school psychologists within their schools. Summarized are the studies (see Table 2) on the national and state levels ranking the predominant roles for school psychologists at that time.

Table 2

National & State Studies Depicting Role and Rank Order

Author(s)	Study Type	Assess	Consult	Direct Service	Research	Program Planning
Meacham & Peckham (1978)	National	1	2	3 ^a	4	
McAfee (1988)	Georgia	yes	yes	yes	yes	yes
Short & Rosenthal (1995)	National	1	2	3	4	
Kimball (1998)	Georgia	1	2	3	5	4
Lowry (1998)	Virginia	1	3	2	4	5

Note. McAfee's (1988) study only identified roles reported to be undertaken by the school psychologist. Short and Rosenthal's (1995) rank order reported was for school psychologists working in a school setting. ^aRemediation was interpreted under the direct services role

Role Descriptions

There are five primary role categories used by Kimball (1998) in his study. They were based on the NASP *Standards for the Provision of School Psychological Services* (1992). These areas included assessment, consultation, direct services, program planning and evaluation and research. NASP, as an organization, has periodically updated these standards from the NASP *Professional Conduct Manual* under the section *Guidelines for the Provision of School*

Psychological Services (2000) into their current form *Model for Comprehensive and Integrated School Psychological Services* (2010). In the newer provisions literature, the terminology of “standards” has moved to the term “guidelines” under a “model”. These areas have also expanded from five categories to ten. These ten guidelines are descriptive in scope and function and more narrative of multiple skill sets under each guideline. The earlier five broad categories are more categorical classifications in which they are each defined. As summarized (see Tables 2 & 3) earlier studies used categories similar to those under Kimball’s (1998) metric. The most recent guidelines from NASP were published in February 2010. The guidelines build on preventative and regular education initiatives for school psychology and expand the guidelines from eight to ten. The ten guidelines fall under three broad categories of practices that permeate all aspects of service delivery, direct and indirect services for children, families and schools and foundations of school psychologists’ service delivery (NASP, 2010).

For the purposes of this research and in order to compare any changes in roles, the older categorical information was used in this study with additional descriptive items added under each category to include updated role functions for school psychologists since the changes of IDEA 2004. The following information examines what the typical skills and functions are under each of the five categorical roles for the school psychologist

Assessment. The first role category, assessment, has been the central role for the practice of school psychology since the introduction of the Binet Scales in 1905 (Anastasi, 1988; Fagan, 1990). Assessment has evolved with the field and should be realized as more than just psychometric testing as noted by Fagan and Wise (1994). Assessment, as defined by the NASP standards in 1992, involves the collecting of information on human functioning and identifying critical factors and provides a degree of their importance as it relates to answering referral

questions. Sattler (1992) discussed the four important foundations for an assessment including using norm referenced tests, collecting interview information, conducting observations and using informal assessments as a way to collect that information on human functioning and problem solving. Fagan and Wise (1994) noted that assessment was a problem oriented process beyond the act of psychometric testing as it involved the integration of information from multiple perspectives and multiple sources.

Like Sattler's view, Fagan and Wise (1994) noted that there are several aspects to assessment including determining the problem or referral questions about the student, conducting observations, searching school records, conducting individual testing, interviewing teachers and parents, synthesizing all of the collected information into a written report and developing recommendations based on the information collected. The NASP *Professional Conduct Manual* (2000) under the professional practices section described attributes about the assessment process which should be manifested in the school psychologist. Examples of these attributes included the consideration and respect for individual differences before any testing occurs, being knowledgeable on purposes and limitations of instruments, using up-to-date instruments, conducting multiple assessment methods similar to what Sattler (1992) and Fagan and Wise (1994) espoused, and developing appropriate and relevant interventions and strategies consistent with the data collected during the assessment. The NASP (2010) *Guidelines* address assessment under the data based decision making and accountability heading. Assessment in these most recent guidelines have been minimized in the traditional sense from earlier descriptions to include "...demonstrate skills to use psychological and educational assessment[s]" (p. 4).

Assessment roles under response-to-intervention (RtI) have included newer school psychologist functions including problem solving and determining the response by students

undergoing specific remedial instruction. Expanded role examples also include involvement with universal screenings, curriculum based measurement design and implementation, data collection and analysis for school and system wide performance of students, team collaboration with regard to problem solving under the tiers of intervention and consultation with progress monitoring of intervention data (Cantor, 2006; “GASP”, 2008).

Consultation. As defined in the NASP (1992) *Standards*, consultation included the school psychologist meeting with key stakeholders involved with the student’s problem and discussing and planning for strategies and interventions to be attempted to alleviate the identified problem. The school psychologist, in this role, is more of a resource of knowledge, framer and decision contributor rather than the individual to actually implement the intervention. Conoley and Conoley (1992) noted that consultation is a “voluntary, non-supervisory relationship between professionals of differing fields designed to aid professional functioning” (p. 1). Consultation involves four steps in the process to include entry, targets, strategies and evaluation. Each of these steps’ purpose is to provide a framework towards resolution (Conoley & Conoley, 1992). Consultation, as related to school psychologists, refers to a mutual problem solving process between professionals. In the consultation relationship, the consultant was the expert. Skills for effective consultation included strong knowledge in the area of consultation, good interpersonal skills, effective listening and communicating, and being a motivator and a confidence builder (Fagan & Wise, 1994). There are multiple hierarchical structures to consider when implementing consultation models. Examples include within the system, from without the system, macro level, micro level, large group, small group and individual (Conoley & Conoley, 1992).

The more recent NASP (2000) *Guidelines* emphasizes consultation in a broader and less traditional sense through a collaborative focus. Emphasis on skills essential for successful consultation include listening, participating in discussion, conveying information and working together. Collaboration de-emphasizes the expert-subordinate relationship moving towards a peer-peer relationship. NASP (2010) *Guidelines* also emphasizes collaboration and problem solving in a team approach. The newer consultation roles promoted involve the school psychologist as a collaborator on the problem solving team within the school and less emphasis as the expert. The team problem solving approach is framed within the multi-tiered model with consultation occurring within and between each of the tiers (Tilley, 2008). GASP (2008) also noted the consultant role to help with the understanding, framing and operationalizing of the tiers and RtI.

Direct Service. The third category is the direct services role for school psychologists. NASP (1992) *Standards* noted that direct service includes application of face-to-face techniques or methods “designed to enhance the mental health, behavior, personality, social competency, academic or educational status of the student/client” (p. 45). Examples of direct services include crisis intervention, anti-bullying programs, positive behavior supports, individual and group counseling and other direct encounters with students or other school personnel or family members. Fagan and Wise (1994) interpreted crisis services as a consultation role while they termed individual and group counseling as in intervention. However, these activities all fit with the face-to-face encounter with a goal of helping the student/client. The NASP (2000) *Guidelines* intimated direct service roles through the utilization of prevention programs, health promotion programs, crisis intervention methods and various counseling situations. The language is less pragmatic and specific. NASP (2010) *Guidelines* includes terms like promote, facilitate, share,

apply and integrate when discussing the programs and problem solving techniques used with students and families. The current guidelines also emphasizes learning and promotes academic intervention development and implementation by the school psychologist in conjunction with other school personnel.

Program Planning and Evaluation. This is another area of potential expansion for school psychologists with the changes from IDEA 2004 and NCLB 2001. NASP (1992) *Standards* noted that the program planning and evaluation role is a developmental and design process which also establishes the capacity for measuring effectiveness and validity along all educational stages/levels of the program. Tilley (2008), in his article, conveyed the idea of a program to provide a structure and method for judging effectiveness in the validity of solutions through the multi-tier model which Georgia has called the *Tiers of Intervention*. Cantor (2006) discussed school psychologist roles as system designers for new service delivery. She argued that school psychologists are uniquely positioned as “among the best trained professionals in the school district” (p. 2). She encouraged aspects of planning to include needs assessment, model/method design and implementation and ongoing evaluation of effectiveness. Program planning and evaluation can be on the state, region, system or school levels. NASP (2010) incorporates many of the earlier role ideas under several areas within the student-level and systems-level services section. The current guidelines promote the school psychologist as collaborator with other school members to design, implement and assess various academic, mental health and social evidence-based interventions and strategies designed to improve the situations and conditions for students. The focus on evidence-based techniques is new language and agrees with NCLB 2001 and IDEA 2004 language.

Research. The fifth category, research, has traditionally been a function in which school psychologists have not been actively engaged (DeSimone, 1999; Hosp & Reschly, 2002; Reschly & Wilson, 1995; Roberts & Rust, 1994; Smith, 1984). Yet it would seem that this role is critical to move the field forward from theory into practice. Fagan and Wise (1994) reported that most school psychologist practitioners are focused least on research because of the time spent in other roles more directly related with children. They indicated that research roles are dependent on the level of training of the school psychologist, the level of interest by the school psychologist and the involvement of university trainers because it is often a requirement within their job. Research was described by the NASP (1992) *Standards* as a systematic process to gather information and establish facts. Fagan and Wise (1994) reported that many school psychologists, due to their level of education, training and familiarity with statistics, may unintentionally find themselves in this role for the school system needing to collect and analyze information. NASP (2010) *Guidelines* promote those skills espoused by Fagan (1990) in terms of data collection and analysis in a variety of ways including progress monitoring, functional behavior assessments, identification and establishment of benchmarks and establishing appropriate goals within group and individual counseling.

New Millennium, New Impetus for Change

In the millennium edition of *School Psychology Review*, the articles revolved around the future of school psychology. Sheridan and Gutkin (2000) noted that roles for psychologists and service delivery shifted little despite decades-long calls for professional reform up to that point. They pointed out that the need for change stemmed from limitations in the current service model, based on the medical paradigm, which had traditionally focused on assess-diagnose-treat. They argued for a change in services and

roles for school psychologists as necessary to meet the needs of *all* students and not just a narrow segment of students in the schools.

Sheridan's and Gutkin's (2000) argument for change from the medical model included a rationale that school psychologists services were too narrow and focused primarily on assessment, diagnosis and placement. Limitations for school psychologists other functions (intervention and prevention) and ability to focus on all types of students had been traditionally left out by legislative policy, state and/or local narrowed conceptualizations of the school psychologist's roles and service. This systemic challenge presented a hurdle for the field and necessitated that school psychologists collaborate with other groups inside the school environment and in the community to promote agency and a services shift.

Hosp and Reschly (2002) examined role differences within psychological services nationally comparing important aspects of each. This national survey also compared current roles, demographics, job satisfaction and other aspects with previous national survey studies. The authors examined the trends from previous studies and found that the assessment of students had still dominated the field of school psychology in every region of the country with over 50% of the time spent in this role. Role emphasis and dominance differed by the region of the country. The mid-Atlantic and Northeast regions focused more on the underlying dynamics of student's problems and used the direct services roles with these students while the South Atlantic (including Georgia) and East South Central regions primary roles remained in the assessment role as the problem solving method of choice. This South Atlantic regional statistic obtained by Hosp and Reschly (2002) was consistent with Kimball's (1998) findings for school psychologists

in Georgia which reported actual primary roles being ordered in predominance as assessment, followed by consultation and then direct services in the ranking of roles.

Hosp's and Reschly's (2002) national study of school psychologists reported that overall consensus by respondents agreed in a major role shift for school psychologists. "Respondents strongly believed that assisting general education teachers' design, implement and monitoring of interventions prior to consideration of special education eligibility should be a major role of school psychologists" (p. 24). Thus, any role shift for school psychology would be away from the century-long ties with the traditional assessment role and special education and towards more of a focus for school psychologists on the regular education students outside of assessment. They also noted that school psychologists reported an overall degree of general satisfaction with their work duties. Summarized is the information (see Table 3) of state and national studies of school psychologist role functions as measured in percentages of time spent in each role category. Hops and Reschly portend a reconceptualization of the field from the traditional assessment role and medical model service delivery towards an ecological services perspective as systemic change agents and a preventative/empirically based intervention model.

Slattery (1995) discussed the term reconceptualization, as coined by Pinar in the mid 1970's, for the curriculum field as an emphasis on the internal (autobiographical and phenomenological) rather than on the external (outcomes) which has dominated curriculum in the schools. Although introspection is occurring within the school psychology field, the reconceptualization occurring remains focused on the educational outcomes paradigm and with and the positivist goals (Tilley, 2008). Doll (1993) encapsulated the *Tyler rationale* and science education movement begun in the 1940's and still seen today. "Tyler sees educational ends set prior to experience, with learning a specifically intended, directed, and controlled outcome-one

Table 3

National & State Studies Depicting Role by Percentage of Time Spent in Each

Author(s)	Study Type	Assess	Consult	Direct Service	Research	Program Planning
Smith (1984)	National	54	19	23 ^a	1	
Smith (1984)	South East ^b	62.6	16.25	17.4	1.4	
Roberts & Rust (1994)	Tennessee	66.8	18.2	17.6		
Roberts & Rust (1994)	Iowa	51.6	29	26.6		
Reschly & Wilson (1995)	National	55	22	20.8		
DeSimone (1999)	Florida	53.5	23.2	8.5	.9	13.7
Hosp & Reschly (2002)	National	55	23	19	2.5	
Hosp & Reschly (2002)	South Atl. ^c	58	21.4	17.2	4	

^aIntervention activities were met under direct services function.

^bSouth East Region included: AL, FL, GA, KY, MD, MS, NC, SC, TN, VA, WV

^cSouth Atlantic Region included DC, DE, FL, GA, MD, NC, SC, VA, WV

that can be measured” (p. 55). This information-measurement-analysis paradigm fits well with the change that is occurring for school psychology.

With IDEA reauthorized again in 2004, school psychologists’ role changes were closer to being realized, or at least the potential for a change in roles. Reschly (1988), some 16 years earlier, had discussed this change for the field in the form of curriculum-based measurement which, at that time, was used primarily to help measure learning growth for special needs children in some regions (Deno, 1985; Deno & Fuchs, 1987). IDEA in 2004, embrace science education as empirical interventions known as scientific based research (SBR) and was aligned with many of the outcome-based and curriculum-based principles found in NCLB (Feuer, Towne & Shavelson, 2002). This intervention-response-outcome model under IDEA 2004, a major shift

with respect to eligibility determination, was specified in the law and may be the zenith for Tylerian modeling (Doll, 1993; Slattery, 1995).

Canter (2006) discussed the challenges of the preventative-focused problem-solving and measurement model and the potential roles shift for school psychologists. NASP, in response to the changes in IDEA 2004 legislation, published Blueprint III in 2006. This latest Blueprint is more aligned with the intervention-response model using scientific based research and endorsed the significant shift away from assessment to a more decision-making approach along with tiered levels of intensive delivery systems for students. It encourages more training on the academic elements of curriculum, instruction and remediation. This most recent publication incorporates some of the same language and paradigm design as the legislation in NCLB 2001 and IDEA 2004 including data based decision making, collaborative approach and accountability.

With the new millennium, demographic changes also occurred with gender, race and the future work force. Traditionally, the racial make-up of school psychologists had been predominantly Caucasian (Fagan & Wise, 1994). Smith (1984) in his national survey noted that 4% of the respondents reported themselves as minority. However, by 2002 , this statistic reflected a significant shift of those reporting themselves as a minority to around 25% in a national survey (Hosp & Reschly, 2002).

It was not until the latter 1970's that a gender shift began from predominantly male to predominantly female in the field (Curtis, Grier & Hunley, 2004). Nationally, the majority of school psychologist graduates had been reported as 80% female and 20% male by Curtis et al. (2004) suggesting a strongly continuing feminine trend overall. However, variation was reported nationally by Hosp and Reschly (2002) as they reported differences among the 9 broad regions examined in their study. The difference variance included a reported low of 53.6% female in the

mountain region to a high of 78.4% female in the West South Central region with a reported average of 66.5% female workforce overall. Curtis et al. (2004) also noted the strong possibility of impending shortages of school psychologists due to retirement projections in the field through 2010 to 2020.

Psychological and Education Science

Scientific based research (SBR) has become the pedagogic mantra for educators today across the nation (Feuer et al., 2002). It is interwoven within the pedagogy of NCLB 2001. The No Child Left Behind Act of 2001, which reauthorized the Elementary and Secondary Education Act, calls for the use of "scientifically based research as the *foundation* for many education programs and for classroom instruction" ("Ed.gov Research", p. 1.). With this new mantra comes a promise for change in education's instructional delivery and expectations in classrooms across America. "As school psychology transitions into an outcome-oriented profession, we continue to evolve new ways to bring science into applied practice in schools" (Tilly, 2008, p. 17). With the curricular and pedagogical change in the educational field in the State of Georgia, the focus, roles and expectations for school psychologists are also undergoing change.

Georgia has recently undergone significant instructional changes over the past 5 years in large part due to these new requirements in the federal laws guiding general education through NCLB 2001, and in the special education arena through the reauthorization of the IDEA 2004. Additionally, Georgia's own Department of Education has initiated major curriculum changes by phasing in the new *Georgia Performance Standards* (GPS) these past 4 years. The new GPS replaces the vintage 1981 *Quality Core Curriculum* (QCC), in part, to try and blend the new federal laws' performance requirements with the general curriculum of Georgia in moving toward a standards (outcomes) based education in the state.

Georgia handles the intervention-response model known as *Pyramid of Interventions* (POI) through a series of levels or “tiers” of increasingly intense remediations which a student passes through for help with problems and (if needed) to enter special education. The *Pyramid of Interventions* model was popularized by a book called *Whatever It Takes* by DeFour, DeFour, Eaker, and Karhanek (2004). In their book, they portrayed case studies of elementary, middle and high school learning communities who dealt with failure and had attempted to improve student achievement. The text relayed how the school faculty collaborated, problem solved and then implemented a model for intervening and remediating struggling learners. They decided if interventions were working by assessing if the students were learning or not. The authors espoused the development of dialogue and a professional learning community among the faculty. It relayed the novel ideas generated by the schools in the case studies to help the weaker student population by doing “whatever it takes.”

The pyramidal structure (see Figure 2) reflects that help for poor performing students would become increasingly more intense and more individually focused and monitored at each level of the pyramid. The top and smallest tier was for students requiring special education. To determine whether or not the interventions along the middle tiers are helping the student a measurement-based decision process using data based decision making is employed. The data based decision making process was popularized in Georgia by another book called *Classroom Instruction that Works* by Marzano, Pickering and Pollock (2001). The authors framed the decision-making procedure within curricular subjects in schools using available or collected data from the learning environment. Within the pyramid of intervention, the student support tiers are provided for the struggling student by the school staff (teachers, administrators, counselors and psychologists) meeting together. The student support teams discuss the difficulties and generate

ideas and strategies on how they can affect learning improvement by doing things differently. The learning community holds problem solving sessions with the goal of helping students and by connecting in a learning community within the school by establishing a focus on learning. The hope for this community would be to establish a culture of learning.

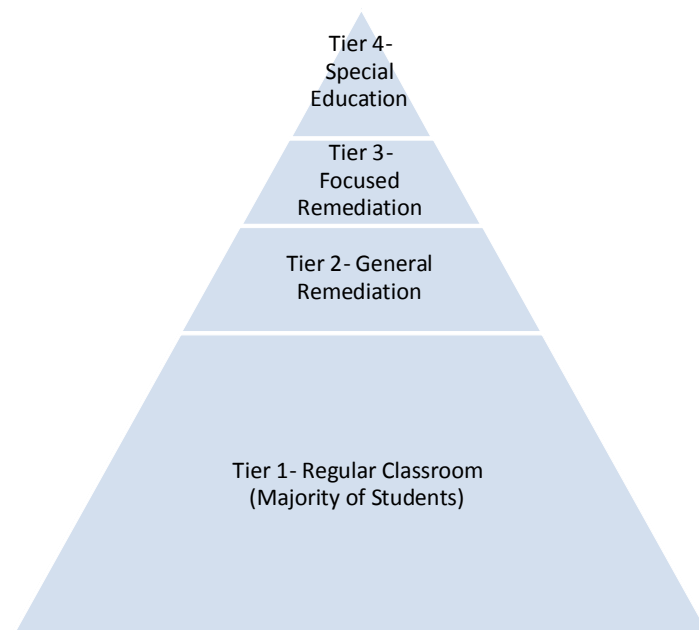


Figure 2. Georgia's Pyramid of Interventions "Georgia Department of Education" (2008)

This pyramidal model holds to the overarching principles of learning and accountability spelled out in NCLB 2001 but at the school level. It was implemented in Georgia as the framework for helping struggling students in 2007. Within this pyramid framework is the principle of the measurement of learning (intervention-response), referred to in the current literature as *response-to-intervention* (RtI), and it uses the scientific based research principle to promote "guaranteed" or proven forms of instructional remediation for student learning. The term used in the literature for guarantee is *fidelity of instruction* and *integrity of delivery* (Batsche, 2006; Christ, Burns & Ysseldyke, 2005; Reschly, 2003; Tilly, 2008).

SBR, as a didactic method for curricular development and instruction in the minds of the pedagogologists and curriculum theorists, implies “teacher proof instruction” as suggested by Apple and Buras (2006), Pinar (2007), and Purpel (2005). David Purpel (2005) warned that education is submitting control of curriculum to the government and substituting diversity for uniformity, flexibility for rigidity and adaptation for overregulation. Pinar (2007) pointed out that the government has long lost confidence in the teacher training across the country and yet at the same time blames and holds them accountable for instruction. He cited Sclanfani, then Counselor to United States Secretary of Education,

Education’s dirty little secret, ... is that teachers are teaching subjects in which they have inadequate training. By using the phrase dirty little secret she implies that the profession has been getting away with something when, in fact, professional educators and administrators have been fighting this problem...

(p. 217)

Apple and Buras (2006) noted that teachers lose the autonomy of instructional choice and freedom to being told what to teach through “learning standards, scripted curricula and high stakes tests for student promotion and graduation...” (p. 169). Thus the subalternarity is guaranteed through control. Scripting the instruction ensures fidelity of delivery of the information. The fidelity principle is used in the response-to-intervention model employed in schools.

After much debate among the different learning communities, professional associations, learning researchers and academia, the IDEA 2004 statutes were changed and provided that states could abandon the traditional way of identifying learning disabled students using the discrepancy model and alternatively use a response-to-intervention approach. The traditional

discrepancy model, which had been in place since the late 1970's, compared a student's intelligence with achievement levels. If there was a significant difference or discrepancy between IQ and achievement a learning disability eligibility could be considered (Kirk et al., 1993). The novel alternative approach under RtI involved measurement and a determination of a student's learning rate over time. If the student was not learning at acceptable rates despite intensive interventions, then he or she could be considered for a diagnosis of specific learning disability (Fletcher-Janzen, 2007; Fuchs & Vaughn, 2006; O'Conner, Macomber, & Smith, 2006).

In essence NCLB 2001 and IDEA 2004, as two separate laws, have blended, in a sense, under the pyramid of interventions model (RtI paradigm) as it contains the components of fidelity through researched based instruction, and accountability of response-to-interventions. The pyramid also includes the whole learning spectrum from regular education and the regular classroom to special education services in separate classrooms. However, to implement this alternative model, large and systemic instructional changes were required ("Ed.gov", 2006; Zirkel, 2008).

NASP was instrumental, during this reconceptualization of services for school psychologists and the paradigm transition, in trying to educate the field of school psychology. NASP used a series of articles in their professional publication, *Communique*, on impending changes that were coming for the field. Dawson (2003) laid out rationale and guidance for the use of IQ testing as inappropriate for identification of learning disabled and introduced the foundational concepts of response-to-intervention and curriculum based measurement, a measurement method used in response-to-intervention. There was initial confusion and concern about what these changes would include regarding roles for school psychologists. Christ, Burns and Ysseldyke (2005) explained the various response-to-intervention models and terminology in

their well developed article. This was meaningful for many practicing psychologists across the country in helping to understand the framework for what response-to-intervention could be in their own work environments and potential roles filled by the school psychologist. School psychologists could then better understand how their roles might change and fit as a result of these systemic shifts in instructional design and the RtI problem-solving and standard-protocol models.

Canter (2006) in the *Communiqué*, also laid out the definitions and terms regarding RtI and how fundamentally important the new model could be for school psychologists. She noted how it would change the test-and-place model, using discrepancy as the mode of learning disability identification, to a series of problem solving decision points using interventions with the student. School psychology roles would fundamentally change from a testing/assessment emphasis to more of a program development and implementation, consultative, data analysis and collaborative role emphasis. Specifically, her message was that this could be an opportunity for school psychologist to be leaders during this period of change.

Fuchs and Vaughn (2006) wrote an illuminating paper explaining response-to-intervention's role in identifying learning disabilities. Lynn Fuchs is well known for operationalizing curriculum based assessment, a key component to RtI. Sharon Vaughn is well known for her reading research and criticism of current reading instruction on a national level. They noted that specific learning disabled (SLD) students are the majority of the special education population nationally. This large group of students is also the most costly for the school systems and one which school psychologists have traditionally been most involved. The learning disabled population was noted to have increased from 1.2 million in 1979 - 1980 to over 2.9 million students in 2003-2004 (Fuchs & Vaughn, 2006).

Fuchs and Vaughn (2006) described an alternative to the assessment role for school psychologists (in the traditional sense). “At the heart of this controversy is the IQ-achievement discrepancy. Although not required by [federal] law, a severe discrepancy between achievement and intellectual ability is frequently used for identification” (p. 1). The alternative method was a major paradigm shift in the process for identification of learning disability. This methodological change in the process of identifying a learning disabled student had, by proxy, also changed the concept of a learning disability. It resulted in shifting school psychologists’ roles and functioning with regard to these poor performing students. Essentially, the RtI model, used for identifying learning disabilities, is controversial because it reconceptualizes a learning disability, thus redefining along with it one of the school psychologist’s primary roles.

The Georgia Association of School Psychologists, in response to legislative changes, has formulated potential roles for Georgia’s practicing school psychologist to work within Georgia’s Pyramid of Intervention framework (GASP, 2008). These newer roles parallel the NASP model in moving the school psychologists beyond the doors of special education and towards regular education, prevention and intervention roles. Some examples of these roles include conducting and/or analyzing data collected from universal (school wide) screenings, defining “progress” within the RtI model, evaluating the effectiveness of interventions, collecting normative academic and behavioral data and implementing positive behavior supports.

With the new federal and state laws essentially redefining what is thought of as a specific learning disability, school psychologists may have opportunities for role expansion including decreased traditional assessment, increased consultation, increased collaboration with educational stakeholders and with research, program development and implementation. As Cantor (2006), Fuchs and Vaughn (2006) and Reschly (1988) have suggested, the field has

potential to move towards regular education initiatives and make contributions with all student populations and with the regular education student who has difficulty in school. As well, the school psychologist may be tasked with operationalizing how to clarify, measure and fit various aspects of a student's profile and learning patterns into the new special education eligibility criteria. Certainly, Georgia's education changes with the implementation of the Pyramid of Interventions, Georgia Performance Standards and changes under IDEA 2004 portend role expansion for field of school psychology in the state.

While the reformers and researchers have been promoting prevention and intervention as the model of choice, there are questions as how school psychologist roles are changing to meet the demands of educational shift across the learning spectrum. It would appear that the special education diagnosis shift, of which school psychologists are an integral part, could be changing the primary role of assessment for the school psychology field. This would seem especially true with regard to the category of Specific Learning Disability. However, questions remain as whether theory and desire are actually converging. Will the field of school psychology in Georgia be moving towards role potential in the regular education areas of prevention and intervention? How have Georgia's school psychologists' roles changed since the last study conducted in 1998 before the IDEA 2004 legislative transformation? What have been the attitudes of school psychologists in the field towards these process changes? Are process changes being felt in the field or is there resistance? Are any changes felt to be realistically helping students? Purpel (2005) noted, "The world cries out for meaning and the profession offers accountability as a response; the people perish for lack of vision, and the profession suggests more elaborate lesson plans" (p. 78). How will the future of the field be shaped by what is

occurring at the present time? These are some of the important questions which were investigated by this study.

Summary

Early pioneers in school psychology included an eclectic mix of different disciplines all working towards solving problems for children and teachers in school. The early school psychologists focused on many aspects of children in school including understanding learning problems and instruction methods, normal developmental sequences of children, behavior issues and social issues (Fagan & Wise, 1994). Fagan (1990) termed the early years as the “hybridized years” due to the differing fields of early psychologists and training/practice asymmetry. With the expansion of the United States population, pressures were put upon schools through various curriculum movements which also focused on instruction, society and effective use of the time in school (Kliebard, 2004). School psychologists pragmatically converged on difficulties with educating those students who did not fit in the normal expected range of learning. The empirical method was to be used in school psychology through IQ testing and through education in Tylerian methods (Kliebard, 1994). The usefulness of mental testing and the connection with special education was established very early in the school psychology field and has remained so throughout the history of school psychology (Fagan, 1990).

From the turn of the century through the middle 1950’s curriculum across the United States shifted with various political and societal winds. Kliebard (2004) summarized various philosophies of instruction and the believed important aspects of the curriculum at the time for the betterment of society. School psychologists also helped to influence and impact some of those educational shifts and views about society. As the United States population increased, some also misused research and data gathered (Barkan, 1992; Lemann, 2000, Lewontin et al.,

1984). Concerns emerged about certain races and populations in the United States. Some individuals used research and IQ data collected to stereotype, discriminate and marginalize certain segments of the population through deterministic and eugenic philosophies. It was not until the latter 1950's that earlier held beliefs were discredited through scrutiny of the research (Gould, 1998; Lewontin et al. 1984; Zenderland, 2001).

School psychologists' roles and practices slowly coalesced under the national organization of the APA. While the number of school psychologists remained low nationally, the primary role for school psychologist was that of evaluator and consultant for learning and special education issues. However, in 1958, the educational perspective dramatically changed in America with the launch of the Russian satellite *Sputnik*. Curriculum movements were displaced by national and congressional focus on education's failures. Federal laws began to be passed nationalizing the curriculum across the country to emphasize science and math (Kliebard, 2004). Around this time society also became more racially integrated in schools and society with passage of legal decisions like *Brown versus Board of Education*, 1954 and the *Civil Rights Act*, 1964 (Kliebard, 2004).

Eventually, low income students and special education also became federalized with ESEA and Public Law 94-142 (Kirk et al., 1993). These laws also increased the need for school psychologists around the country. NASP was created in the 1970's to help represent and standardize the training and practice of the field. Fagan (1990) termed this the "thoroughbred years" for the field of school psychology. The role of assessment and linkage to special education for school psychologists remained entrenched. Roles for school psychologists have been studied nationally and in Georgia. National studies from the 1980's to the 2000's noted that assessment has been the primary role for school psychologists. In Georgia, Kimball's (1998)

study noted that assessment was still a primary role for school psychologists around the state in the late 1990's. Willis' (2000) in-depth interviews with psychologists in the Detroit Public School System suggested that assessment was still an overarching role. Moreover, within that system, a lack of agency and reified assessment had become a source of job stress and strain in that work environment. Further contextualization noted that school psychologists felt powerless, devalued, angry and disappointed over the current roles and functions that they were filling for the school system.

Throughout the latter 1980's and onward, professional commentary, editorials and models have been put forward to expand roles for school psychologists beyond assessment and special education. Many voices, including Reschly (1988, 2000), Will (1988), Ysseldyke et al. (1984, 1997, 2006), Conoley and Gutkin (1995), Bradley-Johnson et al. (1995), Reschly and Wilson (1995), Cantor (2006), Fuchs and Vaughn (2006) and others, have advocated for a changing picture for school psychologists' roles and services within the schools. NASP and APA supported the development of certification standards and also defined service roles in the schools nationally. Additionally, NASP supported the development of school psychologist service models for school systems across the nation with the Blueprint publications (Ysseldyke et al., 1984; Ysseldyke et al., 1997; Ysseldyke et al., 2006).

In all of these arenas, the harbinger has been to move away from traditional assessment, identification and special education focus towards including all students in prevention, mental health and regular education initiatives. The research suggests that theory has still not moved into practice (DeSimone, 1999; Hosp & Reschly, 2002; Kimball, 1998; Meacham & Peckham, 1978; Roberts & Rust, 1994; Reschly & Wilson, 1995; Smith, 1984).

Chapter III

METHODOLOGY

The legislative changes passed by NCLB 2001 for schools across the country represented a major change for the directions of public school curriculum to include scientific based research instruction, more accountability and increased assessment at each grade level (Pinar, 2004). Then in 2004 IDEA added similar changes for students who may be served in special education using similar scientific based research instruction and response to intervention as a way of identifying children who may be in need of special education services (Cantor, 2006; Christ, Burns & Ysseldyke, 2005; Dawson, 2003; Fuchs & Vaughn, 2006).

There has been no shortage of critics for the current status of education since the 1980's or on the status quo limitations and restrictions of school psychologists practicing in the schools (Curtis et al., 2004; Gardner et al., 1983; Hosp & Reschly, 2002; Reschly, 1988; Roberts & Rust, 1992). From school psychology's beginnings, the roles of the practitioner have been inextricably linked with assessment and special education (Bradley-Johnson et al., 1995; Fagan, 1990; Goddard, 1922, Trachtman, 1981; Wallin, 1924; Zenderland, 2001). NASP, as seen through the blueprint documents and national certification board, has also been proactive in providing catalyst for the reshaping of school psychologists practice and roles in the schools.

This research conducted investigated changes in the roles and practice of school psychologists in Georgia and the perceptions of changes in the field specifically examining two overarching questions. The following questions were investigated:

1. To what degree have school psychologists' roles and practices in Georgia changed when compared with the results of Kimball's (1998) and other studies?

2. What are the perceptions, attitudes and feelings of school psychologists in Georgia regarding the recent changes in the field?

Research Design

This mixed methods inquiry combined quantitative and qualitative data collection methods. A survey was used to gather quantitative information regarding current roles, practices and demographics of school psychologists in Georgia. The role data collected were compared with the results of Kimball's (1998) study to examine any changes in the roles and practices of school psychologists in Georgia over the last 12 years. The role data were also quantified in terms of hours spent within each role domain. The demographic data were analyzed for descriptive changes from 1998 trends in Georgia. The study also incorporated interviews from a cross section of school psychologists in the various school settings to assess the perspectives and feelings of psychologists who have experienced role change.

Participants

School psychologists working in the public school systems across Georgia were the target population of interest for this study. Survey participants were a convenience sampling of the membership from the Georgia Association of School Psychologists (n=444) out of a possible total population of school psychologists from the State of Georgia. There were two potential sources of data in determining the total school psychology population. According to the State of Georgia's Education of Department, the number of school psychologists reported working in the school in fiscal year 2008 was 754 ("Workforce", 2009). Another alternative reference source for the number of school psychologists was found from the Georgia Department of Audits and Accounts. Using the fiscal year 2008 information, it was reported that there were 840 school psychologists, school psychometrists (11 reported) and school psychologists working at RESA's.

Clarification as to the discrepancy between the two was ascertained through personal communication with the Research and Evaluation Department of the state's Professional Standards Commission (C. Afolabi, personal communication, November 12, 2009). It was reported that the number of school psychologists in the workforce report was the actual number reported by each of the state's school systems to the Georgia Department of Education. Because the Georgia auditing agency is a budgetary arm of the state, it was reasoned that the listed school psychologists may have been reported as such for financial grounds rather than actual duty positions. Therefore, as such, this research relied on the population size of reported school psychologists (n=754) by the Georgia Professional Standards Commission across the state of Georgia (Afolabi & Eads, 2009). Kimball's (1998) study also used the Georgia Department of Education listing of school psychologists for his study population. The assessable population for this study included all professional GASP members (n=444). Using Krejcie and Morgan's (1970) recommendations of assessment size for a study with a population of 750, the number of responses needed for generalization to the population with 95% confidence would be 254.

A small number of participants were also contacted for a personal semi-structured interview. Those interviewed had volunteered contact information from their online survey responses to be included in a pool of possible interview candidates. Interviews were conducted with 15 veteran psychologists. There were five interviewees within each of the three broad work environments (small, medium and large school systems). The school psychologist interviews included practitioners with at least 10 years or greater field experience. The rationale for using more veteran psychologists was to help provide some context of any felt change within the roles of school psychologists. A relatively new psychologist to the field lacks the exposures of undergoing the field's procedural and legislative changes that a more senior school psychologist

has experienced. A cross sampling of small, medium and large school systems allowed for school psychologists from the different service arenas to contribute towards feelings and attitudes about role changes and their roles in different environments.

Instrumentation

Similar to Lowry's (1998) follow-up study which used a modified survey of school psychologists in Virginia, this study used a modified version of Kimball's (1998) Georgia School Psychology Survey (GSPS). The GSPS was developed by Kimball and was derived from the NASP (1992) *Standards for the Provision of School Psychological Services*. The current survey (see Appendix A) is a Likert type scale and includes Kimball's (1998) original three questions in each of the five broad role categories (three questions in each of five categories). These broad role categories for school psychologists were consultation, assessment, direct services, program planning and evaluation and research. Under each of these five categories an additional two questions were added in this research survey increasing the total questions from 15 (three questions in each of five categories) to 25 questions total (five questions in each of five categories).

The purpose of adding two additional questions was to include the promoted newer duties for school psychologists under the RtI models from NASP's blueprint literature and also within the Pyramid of Intervention roles promotion from GASP and Georgia's Department of Education (Cantor, 2006; GASP, 2008; Ysseldyke et al., 2006).

Examples of newer roles include developing evaluation methods and rubrics for measurement of progress; assisting with evaluating effectiveness of interventions; assisting with developing school wide or system wide positive behavior supports, conducting needs assessments for implementation and training needs of RtI; implementing or providing training

toward instituting positive behavioral supports; and providing oversight for data collection and integration for data used in decision making processes (Cantor, 2006; GASP, 2008; Ysseldyke et al., 2006). The survey was reviewed by dissertation committee members initially and then by a panel of veteran psychologists and also piloted for clarity and ease of implementation in the Fall of 2009. The reviews resulted in some minor modifications including the re-wording of some of the questions, enhancing the presentation of the survey and adding employment clarification to the demographic portion.

The study also used open-ended questions in a semi-structured interview format. Interview participants were asked questions using the survey's roles as a general framework and for the research questions of interest. Patton (1990) noted that open-endedness can add important perspective information for the researcher.

... the open-ended responses permit one to understand the world as seen by the respondents. The purpose of gathering responses to open-ended questions is to enable the researcher to understand and capture the points of view of other people without predetermining those points of view through prior selection of questionnaire categories. (p. 24)

Therefore, a smaller number of participants was interviewed with open-ended questions revolving around the school psychologists' perceptions, attitudes and feelings of changes in their roles and practice. The GSPS survey's five role categories served as a general framework for the semi-structured interviews.

The interview questions (see Appendix B) were reviewed to ensure appropriateness, relevance and clarity. The questions were piloted in the Fall of 2009 and modified based on the ease of implementation and estimation of the outcomes analysis

that they were actually addressing the research questions intended. The review of the pilot interview questions with dissertation committee members resulted in reducing the number of questions from thirteen to eight. Other changes also included narrowing the focus to revolve exclusively around the survey categories and relevancy to the research questions. It also included revising some of the questions towards neutral bias. One example of survey revision included deleting unnecessary questions about peripherally related legal decisions which influenced special education law in Georgia in the 1980's. Another revision changed wording from describing the negative and positive changes for children to simply describing the impacts school psychology as a field was making on children (neutral wording).

Procedures

Online Survey

This study used a modified version of Kimball's (1998) Georgia School Psychology Survey (GSPS). The GSPS was developed by Kimball and was derived from the NASP (1992) *Standards for the Provision of School Psychological Services*. Personal communication was held between Dr. Kimball and this researcher about the use and modification of his survey (L. Kimball, personal communication, July 19, 2009). Dr. Kimball was mailed a letter of explanation of the study and a response sheet to grant permission for the use of his survey (see Appendix C and D). Permission to use the Georgia Association of School Psychologists membership listing to contact school psychologists around Georgia was obtained during the Executive Board Meeting November 2, 2009 (see Appendix E) and permission from the Institutional Review Board at Georgia Southern was granted after review on May 5, 2010 (see Appendix F). The survey was piloted for clarity from any ambiguous survey questions during Fall 2009. The final

survey was posted online using the online survey system *surveymonkey.com* to allow respondents to provide answers to the items (Nardi, 2003).

The participants in this study were contacted initially using the GASP email tree with an explanation of the study and a letter of informed consent (see Appendix G) attached and asking them to complete a survey with the web survey link provided. A follow-up letter was sent out to all GASP members on the mailing list approximately two weeks after the initial email contacts. The reminder letter also included an explanation of the study with web link to the survey and another letter of consent. The data were collected from the web survey and formatted for analysis.

Interviews

A small number of participants were contacted for an individual semi-structured interview. Willis's (2000) study, using in-depth interviews, included the use of 19 interviews in his investigation of the perceived changes for school psychologists in the Detroit Public Schools. Interviews for the current study were conducted with 15 veteran psychologists. The survey respondents with ten or more years experience were solicited to volunteer for an interview with contact information, region and work information collected via the online survey. A listing of those agreeing to an interview was compiled under the appropriate system category and region within Georgia.

For areas where less than the needed volunteer numbers were obtained for an interview, contact was made requesting an interview based on a demographic analysis to determine which school sizes and state regions were still needed. Using the GASP membership information, a personal contact was conducted by the researcher soliciting volunteers in the needed regions and school sizes. There was only one interview needed

by solicitation in the small school system category. All other interviews were obtained by the volunteers from the survey.

There were five interviewees within each of the three broad work environments (small, medium and large school systems). A determination was made to ensure that appropriate interviews occurred across the state by GASP region and also by the small, medium and large school sizes by using the Georgia Department of Education annual reports of *Full Time Equivalency* (FTE) funding for school, which is a formulated number dependent on the number of students enrolled within that school system.

The FTE is a representative number and not an absolute count of students as seen in Table 4 which includes some *examples* of small, medium and large systems by county, FTE and student population. A determination was also made to ensure a representative sample of school districts across Georgia when possible.

It should be noted that in Georgia there are four *very* large school systems which may be included under the large schools but have twice or greater the amount of students of all other large school systems. These very large systems include the counties of Dekalb, Cobb, Fulton and Gwinnett which have 90,000 students or greater. Gwinnett County, the largest school system in Georgia, has over 160,000 students.

The 15 veteran school psychologist volunteers were contacted for a convenient interview date and time. Those who agreed signed an informed consent statement (see Appendix H). The interviews were conducted during summer 2010 at the workplace or home of the participant when possible.

Table 4

Examples of Small, Medium and Large schools by FTE and Enrollment

Size/School System	Reported FTE	Reported Enrollment
<i>Small</i>		
Johnson County	1,176	1,171
Randolph County	1,240	1,255
Hancock County	1,252	1,255
Wilcox County	1,254	1,251
Lincoln County	1,268	1,262
<i>Medium</i>		
Gilmer County	4,275	4,221
Grady County	4,276	4,233
Burke County	4,430	4,438
Pickens County	4,544	4,509
<i>Large</i>		
Bibb County	24,325	24,345
Douglas County	24,936	24,692
Houston County	25,498	25,295
Hall County	26,435	25,499

Note. Source of information is “Georgia Department of Education” (2009)

Data Analysis

Data analysis implemented in this study included quantitative analysis of survey data incorporating both descriptive statistics and inferential statistics and also qualitative coded

interview analysis. The quantitative information collected from the surveys used in this study comprised the original three questions per role category as developed and implemented by Kimball's (1998) research. Two additional questions were developed and added to each domain area reflecting literature promotion for newer roles for school psychologists with regard to RtI and the Pyramid of Interventions (Cantor, 2006; GASP, 2008; Ysseldyke et al., 2006). The rating responses for each category was transformed into mean scores and compared in two different ways.

First, each role category's mean of the responses to the first three questions was compared with Kimball's (1998) original data set for each role category to examine if there are any differences in the means of original data set and the current results. This allowed for statistical inferential measurement of changes in roles between the 1998 data and the current respondent data with an item by item differential comparison using t-test of independent samples to compare the means for the five broad role categories using SPSS version 16.0 (Gay & Airasian, 2000).

Second, means were calculated using all five level of involvement statements for each role category and compared with Kimball's (1998) original data set for each role category. This allowed an examination for any differences in the means of original data set and the current level of involvement results among the five broad role categories for the school psychologist today. This analysis measured change between each of the categories including newer promoted roles in school psychology using t-test of independent samples using SPSS version 16.0.

Kimball (1998) included a rank ordering of role categories to reflect which areas were predominant in Georgia's school psychology community. These analysis were also performed for the current study. However, not conducted in Kimball's (1998) survey but conducted in other

national and state surveys were the descriptive computations of actual hours reported for each of the five domain areas by participating school psychologists. This allowed for more specific summative information regarding estimated time spent in each of the role areas.

The open ended interview responses were transcribed and then analyzed qualitatively for common themes and patterns. Analysis occurred for all 15 participants as a whole and for participants grouped by system size (small, medium or large). Information yielded from the interviews was compared with the survey information for added depth, context or texture with regards to the survey data (Marshall & Grossman, 1999).

Final analysis involved comparisons between Kimball's (1998) original descriptive demographic information and practice aspects and the current results obtained. Examples of elements for descriptive comparison included degree level held, pupil to psychologist ratio, work setting and years in the field. Demographic data analysis was conducted using Excel version 2003 for descriptive statistics, chi square and effect size calculations.

Summary

The research conducted utilized quantitative and qualitative aspects of inquiry into school psychologists' recent role changes when compared with research on role involvement and practices for school psychologists conducted twelve years ago. The study used an extended survey to directly compare current responses with responses of Kimball's (1998) survey. The researcher gathered qualitative interview data from a small group of school psychologists experiencing changes in roles, procedures and practices in schools around Georgia.

The study utilized a sample size of 444 school psychologist and members of the Georgia Association of School Psychologists. This convenience sample represents approximately 59% of the total population of school psychologists working in the public school systems in the State of

Georgia. The goal of this research was to measure and quantify the degree of changes for school psychologists in Georgia regarding past roles, newer roles and practices, as well as capture the phenomena of feelings and attitudes towards any experienced change.

Chapter IV

REPORT OF DATA AND ANALYSIS OF RESULTS

The field of school psychology has had many individual and institutional proponents calling for a shift in primary roles and functions from the test-and-place roles towards more preventative types of roles. The role emphasis for school psychologists has also been to move from being primarily focused on special education towards a focus on students in regular education (Reschly, 1988; Tilley, 2008; Trachtman, 1981; Ysseldyke et al., 2006). National and state studies to date have noted the primary role and function for school psychologists remained focused on assessment with over half of the school psychologist's time spent in this role. However, recent legislative and subsequent administrative changes on the national and state levels have provided impetus for role change.

The current study was conducted to help determine any shifts or changes from the traditionally dominant roles and practices held within the field for school psychologists in Georgia. It was also conducted to help illuminate attitudes and feelings towards any change by veteran school psychologists in the field. The following research questions were addressed in this study:

1. To what degree have school psychologists' roles and practices in Georgia changed when compared with the results of Kimball's (1998) and other studies?
2. What are the perceptions, attitudes and feelings of school psychologists in Georgia regarding the recent changes in the field?

Survey Response Rate

The study utilized a sample size of 444 school psychologists from around the state of Georgia who are members in the Georgia Association of School Psychologists. This convenience

sample was considered out of the total reported school psychologist population size of 754 (Afolabi & Eads, 2009). Krejcie and Morgan's (1970) sample size recommendations for a study with a population of 750 was 254. This number was needed for 95% confidence in generalizing results to the population. The survey response rate for this study was 250 respondents which represented a 56.3% rate of return. While the response rate fell short of the 254 recommended by Krejcie and Morgan, it was comparable to what other state studies reported as response rates (see Table 5). The current response rate of 56.3% fell within the range of sample sizes of the two other state studies which had also utilized the state associations for their populations of study. DeSimone's (1999) and Lowry's (1998) studies had response rates of 49.5% and 78.0%, respectively.

Table 5

State Study Sample Sizes and Percentage Response Rates

Research	State	Sample (n)	Response Rates
Roberts & Rust (1994)	Tennessee	61	57.0%
Roberts & Rust (1994)	Iowa	86	26.0%
McAfee (1988)	Georgia	300	74.0%
Kimball (1998)	Georgia	400	63.0%
Lowry (1998)	Virginia	365	78.0%
DeSimone (1999)	Florida	476	49.5%
Current Study (2010)	Georgia	444	56.3%

Research Question #1

1. To what degree have school psychologists' roles and practices in Georgia changed when compared with the results of Kimball's (1998) study and other similar studies?

School psychology has had theoretical, legislative and administrative impetus to alter the traditional roles in conforming to new regulations and service delivery at the national and state levels of education. This research question was investigatively broad in the sense that various changes within the field of school psychology practices could be analyzed through demographics, work locations of the school psychologists, student to psychologist ratios, and the time reported being spent in each role. Moreover, by using Kimball's (1998) Georgia School Psychology Survey data, a direct comparison of each of the five role domains can also specifically be made to address research question number 1.

Demographic Information

Gender and race. Nationally, the majority of school psychologist graduates had been reported as around 70% female and 30% male with a continuing feminine trend suggested for the future (Curtis et al., 2004). Gender varied by region of the country from a low of 53.6% female in the mountain region to a high of 78.4% female in the West South Central region (Hosp & Reschly, 2004). Gender information for school psychologists in Georgia reported from Kimball's (1998) study indicated at that time 81.8% of the respondents were female with 18.2% male. The current study's responses on gender (see Table 6) reflected 80.3% female and 19.7% male. This was comparable with Kimball's (1998) respondent data and Curtis et al.'s (2004) extrapolations.

Kimball's (1998) results for the racial make-up of respondents included 95.2% as Caucasian which was greater than the current obtained results of 85.6% reported as Caucasian. Hosp and Reschly (2002) noted 69.5% were reported as Caucasian on the national survey. A

comparative summary of the current survey respondents (see Table 8) reflected African-Americans were the next largest respondent group with an obtained 10.9% reported in the current research. This result was much larger than Kimball's study with 3.5% but below the nationally reported respondent rate of 16.2% of Hosp and Reschly.

Table 6

Gender and Racial Comparisons

Demographic Variable	Current Study (2010)	Hosp & Reschly (2002)	Kimball (1998)
Gender			
Female	80.3%	66.5%	81.8%
Male	19.7%	33.5%	18.2%
Race			
Caucasian	85.6%	69.5%	95.2%
African American	10.9%	16.2%	3.5%
Hispanic-American	0.4%	9.8%	0.0%
Asian American	0.0%	2.5%	0.4%
Other	3.1%	1.5% ^a	0.8%

^aHosp & Reschly's study reported this as Native-American.

Employment variables. There were several employment variables which were collected in the research that allow for comparison with Kimball's (1998) results or other national results including school psychologist to student ratios, years worked, types of service model employed and time spent in each of the role areas. These areas are important because of the trends in work loads as well as the aging of the field and future employment needs for the state's school systems. The student to school psychologist ratio has dropped over the last 12 years (see Table

7). The middle column on Table 7 includes aggregated current results to allow for a direct comparison with Kimball's (1998) result formatting.

Table 7

School Psychologist to Student Ratios

Ratio	Current Study (2010)	Current Results Aggregated	Kimball (1998)
<1000	9.8%	9.8%	6.3%
1001-1500	13.3%	31.5% ^a	25.7%
1501-2000	18.2%	-	-
2101-2500	26.7%	43.1% ^a	43.1%
2501-3000	16.4%	-	-
3001-3500	9.8%	15.6% ^a	24.5%
3501>	5.8%	-	-

^a combined ratio percentages of current results for clarity in comparison with Kimball's results
Kimball's study noted that .4% did not report any results.

The state of Georgia funds school psychologist positions at a ratio of 1:2475 which was commensurate with Kimball's (1998) findings of 43.1% of the school psychologists who had student ratios between 2001 to 3000 students served. This statistic remained the same for the reported number of students to psychologist ratio in the current results. However, for those school psychologists in systems with over 3000 students the percentage dropped from 24.5% in Kimball's results to a reported 15.6 % in the current results. Additionally, the 1001-2000 student range increased in the current study to 31.5% from 25.7% in 1998.

Curtis et al.'s (2004) research on national school psychologist workforce trends predicted a shortage through the 2010 decade. Workforce retention is an important factor for Georgia's schools. Therefore, it is important to examine and compare workforce trends within the field of

school psychology in Georgia. When comparing current respondent data with Kimball's (1998) research, the current respondent data suggested that the school psychologist workforce in Georgia's schools is aging (see Table 8). The survey had asked respondents to report their number of years working in education as well as their number of years working as a school psychologist, this allowed the researcher to examine which school psychologists held previous school positions.

Table 8

Total Years in School Psychology and in Education, 1998 and 2010

Range	Current Study (2010)		Kimball (1998)	
Years	In School Psych.	In K-12	In School Psych.	In K-12
0-3	14.3%	9.3%	11.5%	11.1%
4-7	19.0%	16.7%	21.7%	18.9%
8-15	29.0%	24.7%	26.1%	24.5%
16-20	11.7%	15.4%	40.7% ^a	45.5% ^a
21-25	9.5%	11.5%	-	-
26>	16.5%	22.5%	-	-

Note. Current Study N=231 for total years in school psychology and N=227 for total years in K-12

^aKimball's (1998) research included years range 16+

The side by side comparison of Kimball's (1998) results with the current results suggests a larger pool of current school psychologists had formerly been in the school system in some other capacity for those at 16 years and greater. The discrepancies between total years in school psychology and total years in K-12 for those reporting 7 years or below suggested some respondents did not answer. Open-ended responses by those who had worked in other capacities

in education included a range of responses including teachers, counselors, speech therapists, mental health therapists, and social workers. The shift by those respondents to the field of school psychology from other career paths came predominantly from the teaching field. This suggested aging of the school psychology workforce corresponds with nationally predicted trends as purported in Curtis et al.'s (2004) research. Almost a quarter of the respondents (22.5%) are within four years of potential retirement from the school system according to these results and approximately half (49.4%) of the respondents are in the 16-20 year range as compared to 45.5% in 1998. This suggests some aging in the field and in the labor force for the state of Georgia.

Services model, labor type, certification level. The service model was characterized by the type of delivery of school psychological services in terms of the psychologist's location or base of operations (see Table 9). The service varies in Georgia from outside agency services (external to the school system) to school based services (psychologist based in a school). The data suggested just under half of the school psychologists were school based which represented a large shift from a decade ago when reported services were primarily centralized in the systems across the state.

An analysis was conducted using a Yates corrected Chi Square equation to compare the observed versus expected results in the reported school psychologists' service locations. The increase in reported school based psychologists was found to be significant for $\chi^2(3, N = 482) = 118.732, p < .001$. The data is summarized in Table 9 comparing percentages with Kimball's (1998) results. The labor type examined the amount of services given by the school psychologists employed in the school systems. The majority reported full time employment (93.8%). The remaining respondents were 3/4 time (.9%), 1/2 time (3.5%) or contracted basis

(1.8%). Selection of certification level by respondents allowed for the respondents to share educational level and scope of certification in the service area and in the leadership area.

Table 9

Service Aspect Comparisons: Location, Labor Type and Certification

Variable	Current Study (2010)		Kimball (1998)	
Location				
School Based	43.1%		3.2%	
Centralized Office	53.0%		96.8%	
Contracted Services	1.7%		a	
RESA	2.2%		a	
Other	0.0%		a	
Labor Type				
Full Time	93.8%		a	
3/4 Time	0.9%		a	
1/2 Time	3.5%		a	
Contract Basis	1.8%		a	
Certification Level	Service	Leadership	Service	Leadership
Level 5 (Masters)	4.3%	0.0%	8.7%	a
Level 6 (Ed. Specialist)	81.0%	10.0%	77.9%	a
Level 7 (Doctorate)	14.7%	9.0%	13.4%	a

^a not reported in study

A slight increase was noted in the education levels of school psychologists responding to the survey with about 3% more reporting an educational specialist degree and 1% more reporting a

doctorate degree. Those school psychologists with leadership certification can have opportunity for additional administrative positioning in the school system. Of the level 6 and level 7 school psychologists, 19% reported having a leadership endorsement on their certificate suggesting leadership training and potential roles beyond the school psychology field.

Degree of Satisfaction Reported and Compared

The respondents were asked to rate their degree of satisfaction with their current roles as a school psychologist. The ranking on a 6-point Likert type scale ranged from “extremely dissatisfied” = 1 to “extremely satisfied” = 6. Kimball (1998) in his study on school psychologists in Georgia noted more satisfied (75.3%) than dissatisfied (24.7%) employees when aggregating the satisfied versus dissatisfied respondents. The current respondents reported a slight increase in degree of satisfaction (76.4%) versus dissatisfaction (23.6%) reported in Table 10. Examining the extremely satisfied versus the extremely dissatisfied, the current responses reflected more polarized results when compared with Kimball’s results. Within the levels of Table 10

Percentage Comparison Degree of Job Satisfaction

Degree	Current Results (2010)	Kimball (1998)
Extremely Satisfied	12.9%	4.0%
Satisfied	51.1%	47.4%
Slightly Satisfied	12.4%	23.9%
Slightly Dissatisfied	10.2%	16.6%
Dissatisfied	9.8%	7.3%
Extremely Dissatisfied	3.6%	0.8%

satisfaction at both the extremely satisfied and extremely dissatisfied ends of the spectrum, the percentages were larger than previously reported in 1998. There was a much larger group (12.9%) who reported feeling extremely satisfied compared with those school psychologists (4.0%) of 12 years ago. There also appeared to be a greater percentage of school psychologists who were dissatisfied (3.6%) compared to 12 years ago (.8%).

A two-tailed t-test of independent samples analysis revealed that the current respondents ($M = 4.36$, $SD = 1.31$) were not significantly different in degree of satisfaction at the .05 level of significance when compared with Kimball's (1998) results ($M = 4.22$, $SD = 1.06$). The results are presented in Table 11 and compared with Kimball's (1998) results.

Table 11

t-test Comparison of Degree of Job Satisfaction

Satisfaction	Mean and SD Comparisons		Equality of Means	
	M	SD	df	t
Current (2010)	4.36	1.31	421	-1.27
Kimball (1998)	4.22	1.06		

Reported Hours Spent in Each Role

Respondents were asked to estimate the number of hours each week they spent in each of six roles. The role areas were assessment, consultation, program planning and evaluation, research, direct service and other. Respondents reported the number of hours spent in each role with percentages calculated for each. The role areas were analyzed considering the five broad specific roles (without *Other* category) and also with the non-specific *Other* category included for percentage of time spent in each area. Respondents were asked to consider time spent within

a 40 hour work week. However, hours reported were a total average of 52.11 hours in the work week. Hours reported excluding the Other category totaled 44 hours in a work week. A summary of total hours spent, and percentages considered with and without the Other category (see Table 12) for each follows.

Table 12

Hours and Percentages in Role Areas with and without Other Category

Role	Mean Hours	Percentages without Other	Percentages with Other
Assessment	18.91	42.8%	36.3%
Consultation	11.88	26.9%	22.8%
Direct Services	6.17	14.0%	11.8%
Program Planning	5.72	12.9%	11.0%
Research	1.49	3.4%	2.9%
Other	7.93	^a	15.2%
Total	52.10	100%	100%

^a Percentages were calculated without Other category included

Analysis of the Reported Level of Role Involvement

Using Kimball's (1998) Georgia School Psychologist Survey (GSPS) data allowed for a direct comparison of each of the five role domains specifically to be made to address research question number 1. In the survey, Kimball developed three descriptive statements which were rated for each role domain for a total of 15 questions covering the five role areas. Respondents were asked to rate their level of involvement on a 6-point Likert type scale which ranged from "no involvement" = 1 to "total involvement" = 6. The means and standard deviations for the current respondents, using Kimball's GSPS three descriptive statements, were summarized (see

Table 13). The rank order for the current results were identical to Kimball's (1998) results in terms of ranking the mean representing the degree of involvement for each role area. Each of the current reported areas reflected a slight increase in level of involvement by school psychologists when compared with 1998.

Table 13

Role Area's Means and Rank Order Comparisons: First 3 Survey Items

Role Area	Current Research (2010)		Kimball (1998)		Rank Order	M difference M ₁ - M ₂
	M ₁	SD	M ₂	SD		
Assessment	5.47	0.85	5.32	0.76	1	.15
Consultation	3.79	1.04	3.16	0.95	2	.63
Direct Service	3.14	1.27	2.89	1.02	3	.25
Prog. Planning	2.64	1.18	1.92	0.86	4	.72
Research	1.98	1.15	1.63	0.89	5	.35

Note. M₁ = current research means of first 3 items, M₂ = Kimball (1998) research means
Current research (N=250), Kimball's research (N=253)

The assessment role was the role of highest involvement rated by the school psychologists (M = 5.47, SD = .85). This was comparable to Kimball's (1998) results which reflected assessment as the highest level of involvement (M = 5.32, SD = .75). This would correspond to having much involvement to total involvement in this role area. The consultation role was the next highest area of role involvement with a mean of 3.80. In terms of the rating, this role fell between little to some involvement for the school psychologist respondents. The role of direct services had an obtained mean of 3.14 and also fell between little to some involvement rating. The last two role areas, program planning and evaluation and research corresponded with little to very little involvement with means of 2.65 and 1.98, respectively. The means obtained reflected noticeable

differences with some greater than others. A two-tailed t-test of independent samples was used to compare the reported role involvement for the current respondent results with Kimball's (1998)

Table 14

t-test Comparison of School Psychology Roles: First 3 Items

Role Area	Mean Comparisons		Equality of Means		Effect Size
	M	SD	df	t	ES
Assessment					
Current (2010)	5.47	.85	501	-2.113*	.197 ^a
Kimball (1998)	5.32	.76			
Consultation					
Current (2010)	3.79	1.04	501	-7.105**	.666 ^c
Kimball (1998)	3.16	.95			
Direct Service					
Current (2010)	3.14	1.27	501	-2.416*	.245 ^b
Kimball (1998)	2.89	1.02			
Prog. Planning					
Current (2010)	2.64	1.18	501	-7.767**	.851 ^c
Kimball (1998)	1.92	.86			
Research					
Current (2010)	1.98	1.15	501	-3.836**	.392 ^c
Kimball (1998)	1.63	.89			

Note. *p < .05

** p < .001

^apower = .21 Using Cohen's (1988) Power Tables for t-tests. (pp. 36-37).

^bpower > .61 Using Cohen's (1988) Power Tables for t-tests. (pp. 36-37).

^cpower > .99 Using Cohen's (1988) Power Tables for t-tests. (pp. 36-37).

obtained means. The current results in Table 14 also note effect size of the calculated means for the first three questions in each role area obtained. This would allow for comparison of current results with those obtained in 1998 as the role statements used in Kimball's (1998) study were identical.

The t-test results reflected statistical mean differences between the respondents and Kimball's (1998) results in all five role areas at the .05 level of significance or greater. The effect size and power were also adequate to suggest a degree of statistically significant differences (avoiding type II bias) and adequacy of sample size (robust sample size) for role area analysis. Effect size for the role areas of assessment and research fell in the small range (Cohen, 1988). This reflected reported smaller increased levels of involvement for the current respondents from those of 12 years ago. Effect size for the role areas of consultation, direct services and program planning fell in the medium to large range (Cohen, 1988). This reflected reported medium to large increased levels of involvement when comparing the results of 12 years ago. Overall, school psychologists reported increased involvement in all five role areas when compared with the results in 1998.

Modified GSPS survey comparison with 1998 results. Besides using the three original statements of involvement for the roles, the survey for this research was modified to include two additional statements for rating the level of involvement by school psychologists for differences in role areas. These statements encompassed some promoted newer duties for school psychologists under the RtI models from NASP blueprint literature and also within the Pyramid of Intervention roles promotion from GASP and Georgia's Department of Education (Cantor, 2006; GASP, 2008; Ysseldyke et al., 2006). Therefore, the total number of descriptive statements on this survey available for rating the level of involvement by school psychologist participants

was five for each role area (see Appendix A). The means, standard deviations and differences between all five items and Kimball's (1998) are reported for comparison in Table 15. The t-test results and effect sizes were summarized in Table 16 comparing the current results using all five statements and Kimball's (1998) results.

The results of mean calculation using all five level of involvement statements in each role area indicated no difference in rank ordering from Kimball's (1998) mean ranking results. There were noticeable differences in all of the role areas with the exception of the direct services area. The assessment role area ($M = 4.64$, $SD = .79$) was also the only area which showed a noticeable decrease in the level of involvement when compared with Kimball's (1998) results ($M = 5.32$, $SD = .76$). This would correspond to current respondents having some to much involvement versus much to total involvement of the school psychologists in Kimball's study.

Table 15

Role Area's Means and Rank Order Comparisons: All 5 Items

Role Area	Current Research (2010)		Kimball (1998)		Rank Order	M difference $M_1 - M_2$
	M_1	SD	M_2	SD		
Assessment	4.64	0.79	5.32	0.76	1	-.68
Consultation	3.88	1.03	3.16	0.95	2	.72
Direct Service	2.98	1.18	2.89	1.02	3	.09
Prog. Planning	2.70	1.17	1.92	0.86	4	.78
Research	1.96	1.08	1.63	0.89	5	.33

Note. M_1 = current research means of all 5 items, M_2 = Kimball (1998) research means
Current research (N=250), Kimball's research (N=253)

A two-tailed t-test of independent samples was used to examine if differences in the level of involvement, reflected in the calculated means, were significant when considering all five statements of the current survey compared with Kimball's (1998) study.

Table 16

t-test Comparison of School Psychology Roles: All 5 Items

Role Area	Mean Comparisons		Equality of Means		Effect Size
	M	SD	df	t	ES
Assessment					
Current (2010)	4.64	.79	501	9.765*	-.884 ^b
Kimball (1998)	5.32	.76			
Consultation					
Current (2010)	3.88	1.03	501	-8.017*	.751 ^b
Kimball (1998)	3.16	.95			
Direct Service					
Current (2010)	2.98	1.18	501	-.861	.088
Kimball (1998)	2.89	1.02			
Prog. Planning					
Current (2010)	2.70	1.17	501	-8.514*	.910 ^b
Kimball (1998)	1.92	.86			
Research					
Current (2010)	1.96	1.08	501	-3.724*	.369 ^a
Kimball (1998)	1.63	.89			

Note. * $p < .001$. ^apower > .92 using Cohen's (1988) Power Tables for t-tests. (pp. 36-37).

^bpower > .99 using Cohen's (1988) Power Tables for t-tests. (pp. 36-37).

The t-test analysis reflected significant differences ($df = 501, p < .001$) among four of the five role areas between Kimball's results and the current results. These differences included a reflected decrease in involvement in the assessment area for school psychologists as well as increases in reported involvement in the role areas of consultation, program planning and research areas.

Level of involvement in the role of assessment. The mean rating of the assessment role area for the current research using all 5 statements ($M = 4.64, SD = .79$) and the mean rating of Kimball's (1998) research ($M = 5.32, SD = .76$) were significantly different ($df = 501$) $t=9.765, p < .001$. The results of the mean comparisons reflected a large effect size of $-.884$ (Cohen, 1988). Current school psychologists reported decreased levels of involvement in the area of assessment than in 1998 and when considering the newer role functions combined with the original role statements.

Level of involvement in the role of consultation. The mean rating of the consultation role area for the current research using all 5 statements ($M = 3.88, SD = 1.03$) and the mean rating of Kimball's (1998) research ($M = 3.16, SD = .95$) were significantly different ($df = 501$) $t = -8.017, p < .001$. The results of the mean comparisons reflected a medium effect size of $.751$ (Cohen, 1988). Current school psychologists reported increased levels of involvement in the area of consultation than in 1998 and when considering the newer role functions combined with the original role statements.

Level of involvement in the role of direct service. The mean rating for the current research using all 5 statements ($M = 2.98, SD = 1.18$) and the mean rating of Kimball's (1998) research ($M = 2.89, SD = 1.02$) were not significantly different at the $.05$ level of confidence ($df = 501$) $t = -.861, p = .389$. The results of the mean comparisons reflected minimal difference

between Kimball's (1998) reported level of involvement in the area of direct service and the current reported level of involvement and when considering the newer role functions combined with the original role statements. The level of involvement remained generally the same.

Level of involvement in the role of program planning. The mean rating of the program planning and evaluation role area for the current research using all 5 statements ($M = 2.70$, $SD = 1.17$) and the mean rating of Kimball's (1998) research ($M = 1.92$, $SD = .86$) were significantly different ($df = 501$) $t = -8.514$, $p < .001$. The results of the mean comparisons reflected a large effect size of .910 (Cohen, 1988). Current school psychologists reported higher levels of involvement in the area of program planning and evaluation than in 1998 and when considering the newer role functions combined with the original role statements.

Level of involvement in the role of research. The mean rating of the research role area for the current research using all 5 statements ($M = 1.96$, $SD = 1.08$) and the mean rating of Kimball's (1998) research ($M = 1.63$, $SD = .89$) were significantly different ($df = 501$) $t = -3.724$, $p < .001$. The results of the mean comparisons reflected a small effect size of .369 (Cohen, 1988). Current school psychologists reported greater levels of involvement in the area of research than in 1998 and when considering the newer role functions combined with the original role statements.

Research Question #2

The primary research question guiding the interviews was: What are the perceptions, attitudes and feelings of school psychologists in Georgia regarding recent changes in the field?

The sub-questions that assisted in this interview inquiry included:

1. What role changes were experienced over the school psychologists' careers?
2. How has RtI impacted role changes and how has it impacted students?

3. What were school psychologists' feelings regarding role change with RtI?
4. What were some empowerments and barriers to role changes?
5. What do school psychologists envision as future roles?
6. Regarding the survey Part 3, question 1, what does the category of *Other* mean in the roles of school psychologist?

This study used open-ended interview questions in a semi-structured interview format to investigate and contextualize the perceptions, attitudes and feelings of the school psychologists in Georgia about the changes occurring in the field. Interview participants were asked questions revolving around the survey as a general framework for the research questions of interest (see Appendix B).

Interviews in this investigation were conducted with 15 veteran psychologists with 10 or more years experience and consisted of five interviewees from three broad work environments (small, medium and large school systems).

Veteran School Psychologist Interview Results

Respondent Profiles

Interviews were conducted with 15 school psychologist volunteers to help answer the research question about the perceptions and feelings regarding changes occurring in the field in Georgia. Pseudonyms were used in the reporting of interview information in these results. These interviewees were selected to include small, medium and large school systems located across Georgia. Each sized school system group had five volunteers in it. The average years of experience for those 15 participants interviewed was 22.06. For those participating in the interview from small schools the school size average was 1797 students. The system student size average for medium school participants was 3864. The system average for large school

participants was 22,138 students. Reported in Table 17 is the participants' average for years of service within the small, medium and large size schools.

Table 17

Respondent Profile Information

System	Average Size	Average Years Experience
Small School Systems	1,797	26.6
Medium School Systems	3,864	20.4
Large School Systems	22,138	20.3
All School Systems	-	22.1

Anecdotal information gathered during the interviews suggested there was a mixture of school based and centralized school psychologists who participated in the interview with no clear pattern reflected toward one direction or the other. Typically, role discussions from school psychologists in the smaller school systems, reported broader duties and positions. During one interview when the school psychologist was asked if he had multiple roles and duties within that system. He stated, "You could call me a hat rack actually!" Examples of differing roles and duties given by school psychologists from the smaller school systems included SST coordinator, RtI coordinator, 504 coordinator, interim special education coordinator and Title coordinator.

Within the larger school systems, the school psychologists tended to report more singular specialization in a few settings in the county. Examples reported by these school psychologists included handling only re-evaluations, handling only elementary schools or only working with SST and assessments at specific grade levels. The larger systems seemed to have more bureaucratic layers in the system with examples including

interventionists, behavior specialists, RtI specialists by school level, lead psychologist, and assistant level administrators.

For the majority of school systems, the school psychologists reported this was the third academic year for changes being implemented in their school system. All of the interviewees indicated an RtI process and POI at the elementary school level only. Most school psychologists reported that a process for RtI was still being developed or in an infancy stage at the middle and high school levels.

Role Changes Over Career

Virtually all the school psychologists reported a decreased emphasis in the assessment role over the span of their career and a broadening of other role areas such as consultation, program planning and direct services. Most interviewees described their early career focus as testing primarily. Typical examples are from the three sized school systems.

John, from a small school system, reported his experience early on as, “mostly assessment and report writing and it was diagnosis and placement.”

Janet, from a medium sized school system, described her early experiences as, “more of an evaluator as far as going in and testing the children and writing reports, doing eligibilities and then meeting.”

Richard, from a large system, reported a similar experience. “When I started out back in the late 1970’s all I did was evaluations. There was no consultation, no program planning or counseling services or anything like that. It was 140 to 150 evaluations a year, of course back then the evaluations were 60 to 75 minutes.”

The decrease in the assessment role was noteworthy in that the number of assessments completed by the school psychologists dropped. Many school psychologists also reported an increased involvement and expansion into addressing problems with regular education students earlier in the process rather than having problems multiply until the situation became a special education referral. Two examples of the expansion into regular education.

John, from a small school system, reported, “Whereas five years ago, the students I was familiar with as part of the school system would be those kids who were referred to me, those kids in special ed. Now I’m working with a good 30 percent of general ed population. I know what their problems are well before they are referred [for testing] and the majority of children never are referred.”

Teresa, from a large system reported, “Basically I’ve spent more time with SST prior to any referral for assessment or just because they never wind up being referred... looking at data, discussing interventions and working with teachers. There’s more preventative work and pre-assessment work I guess [with regular education students].”

Most school psychologists described changes from an assessment focus to engaging in more consultation, program planning and direct service areas. They attributed this to changes with the laws, rules and regulations in Georgia with RtI and POI. Many also attributed increased consultation with the establishing of relationships with people within their spheres of influence at schools and the board administrative level. Consultation types reported varied and included meeting with board level administrators, in-service training to schools, school level administrators, teachers and parents.

Trish, from a small school system, noted, “I’ve had a chance to establish friendships and relationships with these folks. That I think... it makes them more comfortable with asking me questions...” She also reported an increased emphasis in consultation on RtI. “We have worked on each school trying to develop a RtI process for them to follow and we had our special ed lead teacher, who is pretty experienced, and one of our assistant principals and I sat down and kind of came up with a paper trail to follow to make sure we had documentation, you know, for RtI.”

Mary from a medium sized school system, reported, “I’ve started making more presentations and I’m going to do some training. I want two from each school and let them redeliver to try and get some upper level leadership trained [in RtI].”

Richard, from large system noted, “In the 1990’s I began to do more direct services with kids... more counseling, crisis intervention and mentoring. With RtI, I review the folders and help the RtI teams with behavior contracts... the teachers are sharp with academics and rarely need my assistance with that, but with behavior concerns they do.”

The school psychologists reported a decrease in the assessment roles and an increase in consultation, program planning and direct service with a focus on changes regarding RtI.

Increased consultation roles were attributed to personnel and other stakeholders' questions regarding RtI process changes in the schools. Relationship development, e.g., trust and respect, also was seen as a contributing factor for increased consultation.

Perceptions of RtI's Impact on Roles and Students

A common theme for the impact of the RtI changes on school psychologists' roles included increased consultation with others revolving around the development of the procedures and processes and helping other stakeholders understand the processes to be implemented in the school system. Many school psychologists reported an increase in attending meetings for students to help in data analysis and guide teams in data based decision making or intervention changes.

John, in the smaller school system reported, "We basically started from scratch and developed RtI teams at each school. Basically focused on reading and math, put in the interventions, put in the progress monitoring, developed teams at each school that I meet with on a weekly basis."

Trish, in the smaller school system noted, "More consultation [about] the whole RtI process and that they got to have all the documentation. Doing more observations and working with assistant principals and counselors because there's some misunderstanding... trying to look at the root cause of why they [students] are not being successful."

James, from a small school system, reported, "Having some regular contacts of teachers or groups of teachers to help them understand the processes like student support team and helping them understand the implementation of it."

Stacy, from a large school system, noted, "At my elementary schools, I spend a whole day in SST meetings, literally all day long, doing more consultation... talking about their data, making them show you their data, plotting their data and seeing if they [student] responded to their intervention."

Most school psychologists also were in agreement on the positive impacts that the changes in roles and RtI are making on students. Several anecdotal reasons cited by school psychologists for perceived improvements were improved standardized test scores like the

Criterion Referenced Competency Test (CRCT), removal from the school failure list by making Adequate Yearly Progress (AYP) and improvements in proportional special education placement ratios which resulted in no longer being listed as disproportional in the county with regards to the state of Georgia formula for disproportionality of services. Some of the school psychologists also perceived positive impacts for students through the RtI process which holds teachers and schools accountable to implement remedial interventions for the struggling students. Moreover, school psychologists saw the positive impacts of the RtI process changing the teachers mindsets against the singular focus of special education placement towards focusing on the child's general learning and improvements from interventions being implemented.

Trish, in smaller system, noted, "I feel like it has helped, we have seen some children make progress through this whole process, they [teachers] really try to be careful about who they refer for testing and really try to look at whether they made progress or not."

However, a few of those interviewed perceived some negative impacts by the changes. These included a delay of services believed immediately needed for some students by the RtI process, not having any perceived improvements seen in the student body and having school faculty resistance to the changes.

Teresa, in larger system, noted, "It's impacted them, depending on one's perspective, both positively and negatively. I do think that some students have benefited from the interventions they needed to have. Other students unfortunately have gotten caught up in a delay, an unnecessary delay, in identification of a disability."

James, in smaller system, noted, "It's been moving very slowly so we really haven't seen major outcomes yet. We've gotten a lot of resistance from teachers... we're still having a lot of work to do on this. I don't think it's been that great so far. I don't think it's reached its potential."

Feelings Regarding Changes in Roles

Change generally makes people uncomfortable and, as such, the school psychologists undergoing legislative changes concerning RtI and potential role changes predominantly reported

feelings of nervousness and uncertainty about the future. The descriptive words used to describe their feelings about the initial changes included nervous, apprehensive, scared, unsure, frustrated and inadequate. Most of the school psychologists expressed an uncertainty about what the legislative changes would include and what degree of role change would be involved for psychologists. There were some feelings of inadequacy and frustration expressed as realization of what educational and role changes were to occur.

Trish, in the smaller school system, described the transition to RtI and POI as confusing. She reported, “there was a lot of confusion... had a really hard time getting a straight answer from the state department about what we needed to be doing. There were a lot of mandates thrown out there without a whole lot of directions behind them. It was very disconcerting, cause I always felt like I knew what I was doing pretty much. The analogy has been made of trying to build the airplane while you’re flying it.”

Krissi, from a medium sized school system, noted, “When school psychologists first started hearing about the RtI process, most of us were panicked beyond belief. Because we were having trouble, you know, just getting good solid SST’s going and then they were going to add something extra to that? It was kind of scary.”

Kristen, from a large school system, reported, “I felt frustrated, nervous and apprehensive. In theory I learned about RtI years before it was implemented. I thought theoretically it was a good idea if it was done correctly. But when I saw that idea come to reality in the county I work in, I was concerned, in that, I could see it was not being implemented in a way that it needed to be implemented. It was done fast and without appropriate resources and so I was scared to see that play out.”

Some of the school psychologists expressed feelings of inadequacy with the shift as their programs and training in graduate school were not as focused on curriculum and curriculum based measurement as these new procedures called for.

Janet, from a medium sized school system, reported feelings of uncertainty. “We had to be the initiator in a lot of this... we don’t know all the curriculum... I felt very inadequate sometimes going into a teachers classroom and going you are not doing this right.”

Richard, from a larger school system, expressed concerns about his lack of training. “Quite frankly, I was nervous, I’m an old man and when I went through school my training had been on evaluation and very little on interventions and anything along that. I’ve had to pick it up along the way.”

A few school psychologists expressed curiosity about how the change would be implemented and a few reported feelings of happiness at the news of change. Some reported wondering how the process would work and questioned if the teachers would go along.

Stacy, in a large school system, wondered, “When it first started, I remember thinking, how am I going to get these people to do it? And they are all going to be mad at me. And how to do the interventions and things... I don’t know all that stuff.”

John, from a small system, reported, “I feel really good about the RtI process. It’s been a really good process that school psychologists have known about for years and years but we never could get people to use data to make decisions.”

Empowerments and Barriers to Role Change and RtI

School psychologists were asked to discuss any perceived barriers and empowerments of their attempts at changing roles with the RtI and POI process. A theme emerged across school system sizes regarding the feelings of support or resistance by administrators in the top tiers at the schools and board levels towards changes in roles by the school psychologist and RtI. Systems which did not have much upper echelon support perceived administration as a barrier while school psychologists felt empowered by those administrators who promoted the new processes in the system or viewed RtI as a way to improve school instruction. The following includes examples of those who characterized their perceptions as feeling unsupported.

Felt unsupported.

Shaneese, from a small system, felt unsupported as her administrative level instructional coordinator did not foresee the need to support the RtI process. Shaneese reported, “The biggest impediment was the attitude of regular education who had to think about a complete change in what they were doing, normally doing, with kids who were in the regular education process. The instructional coordinator does not want to go there with RtI at all.”

Krissi, in a medium sized system, reported lack of impetus, “We, for a long time, for two years, we were kind of this is your job, this isn’t your job, this is your job and you know I could see the job wasn’t getting done.”

Samantha, in a medium sized school system reported, "Lack of administrative support that has been a barrier in changing my role because if you don't have administrative support, I can say what ever I want to say, but if I don't have a school base principal say, Ms. Smith got this and you need to do this, or if we don't have the board level saying, this needs to be implemented, listen to what she's telling you, then I've just got empty words."

Jenna, from a large system, reported that the old administration hampered role change for school psychologists in her county. "Probably the first year and a half that RtI rolled in...I felt like there was nothing I could do if I had ideas, they were not ideas considered, but the administrative shift [new administration] made the biggest difference. Our ability to shape and improvise the response to intervention is much better now."

These school psychologists are examples of those who felt supported by the administration and by the process while under going the changes.

Felt supported.

John, from a small system, stated he did not feel any barriers from administration. "They used me as someone who has knowledge outside their scope of knowledge. My superintendent uses me to address issues such as school wide discipline plans, differentiated instruction in the classrooms, research type questions."

Charlene, in a medium sized system, reported, "The administrative leadership has been supportive and it had to come down from the top, from the superintendent on down, because it does take money and it does take some influence over principals. And you have to work within the system, you can't do anything by yourself. In the past I would go to a workshop like on DIBELS and couldn't get it going but now the support of administration has really helped."

Stacy, from a large system, reported, "I was lucky... the assistant principal was in charge of RtI process at the school and supposed to attend Tier 3 meetings. Having them attend the meeting really makes the teachers collect the data... and it helps having them do the reviews [of data information] with me."

A secondary theme emerged regarding the perception of who held the responsibility for RtI implementation within the school system- regular or special education. School psychologists reported resistance to role change, and the process in general, by those in the regular education system, teachers, the instructional coordinators and principals. They predominantly reported that

their systems thought RtI was a function under special education which caused problems of investment by regular education teachers and schools.

Shaneese, in a small system, reported, “The attitude of regular education towards RtI has been the biggest hurdle in the whole process... Regular Ed and Title I, to me, should be the key players in RtI and that’s not the way it is at all and very few places is that the case. I think Special Ed ends up being the key players in most of it.”

Krissi, in a medium sized system, reported, “School psychologists are housed with special education and are thought of as part of special education, not like a separate entity... so I really did feel like it wasn’t my job, that I serve all the students, and so it took a long time for them [regular education] to understand that they were gonna.... In the beginning, administration just knew it wasn’t our job, but nobody had a plan how it was supposed to happen and they weren’t really responsible for it. We were gonna be held accountable once we got to the eligibility process... so empowering to us was the thought that children aren’t going to get services unless we get in there and figure out how to make this happen... it was like they were going this isn’t your job you can’t do this.”

Kirsten, in a large school system reported, “In my system they [administration] welcomed our input and we were in a unique position to spend the time learning. There were no referrals, so we had the time to study and learn and do training. It was very much appreciated. But I realized that you train everybody and do this work and you assume they are going to do it, but if the principals don’t pull up and do some fidelity work then it just wasn’t going to get done and that was a really frustrating thing for me.”

Additional barriers to perceived change for school psychologists reported were lack of money which affected supplemental training time for school psychologists to familiarize themselves in aspects of RtI and newer roles for school psychologists.

Envisioned Future Roles

The school psychologists were asked to discuss what they perceived to be future roles for the field. Most of the school psychologists saw expanding roles in consultation and interventions with the POI and RtI process in Georgia. Consultation included elaboration of the changes in the RtI process, new regulations governing those changes as well as local procedural changes to facilitate getting additional help for struggling students. Interventions included helping with research and selection in the systemic processes of intervention, helping schools with organizing

the interventions, assisting teams with measuring student progress, helping teachers with becoming aware of and using the interventions and aiding in conducting interventions in schools. A few school psychologists saw increases in the counseling/mentoring, liaison and community support roles.

John, from a small system, reported, “We’re going to have to be much more interventionists than diagnosticians in the future. I feel certain that that is the way we are going and we have the skills to do it. But we have to have the flexibility to change our thought process.”

Krissi, in a medium sized system, reported, “Because of our training we bring something very unique to the situation... if they would invite us to look at the data with them we might would bring something a little extra. But right now we can only offer isolated suggestions here and there and are not part of the team.”

Kirsten, in a large school system reported, “I see us doing more consultation and we really have an open field for more future roles in whatever we want to do. I hope we can do less assessment but still help the students.”

Other Role Category

This question was included as a follow-up to the survey to provide opportunity for open-ended responses to what school psychologists were envisioning when they categorized their time in their job each week considering the nonspecific area *other*. Respondent answers varied with no specific dominant patterns or themes. Several school psychologists expounded on the extraordinary amount of time spent on specific child cases and their efforts and time spent to help them or in a liaison capacity to obtain an outside service for them and their family.

Trish, in the smaller school system, described her efforts with parents, “We have a parent mentor and so she and I work together to try and get parents to meetings, and I’ve gone on home visits. We work with psycho-educational staff to make sure our kids are getting their needs met over there and in dealing with DFACS... you never know what the next day might bring!”

Janet, from a medium sized school system, reported, “We have some parents particular to our Pre-K children that I am their initial contact. Some of them just attach to you and I’ve done things from going to buy food for them to when the child is sick and throwing up

and I had to get her from school because the mom didn't have a car to take her to the doctor. I mean things like that."

Others mentioned clerical duties, answering emails, completing time sheets and time spent on other paperwork. A few mentioned various meetings such as manifestation determination meetings and time spent supervising other psychologists or practicum/interns.

Jenna, from a large system, stated, "I spent a lot of time last Fall supervising and I'll have another one [intern] this next year. People think your workload is decreased because you have those but I found that it doesn't decrease your workload at all (laughing) only just changes how you do things."

Summary

This investigative study was conducted to help determine any shifts or changes in the roles and practices held within the field for school psychologists in Georgia. The study included a survey to compare results of current practicing school psychologists with those of 12 years ago with regards to roles in assessment, consultation, program planning and implementations, research and direct services. The inquiry also incorporated interviews of veteran school psychologists to help frame the attitudes and perceptions of the current changes.

The results of the analysis noted significant differences in aspects of practice and of roles for school psychologists in Georgia. These include changes in where school psychologists are based to changes in the level of involvement for the different role areas. Decreases in involvement of assessment were reported as well as increases in the role areas of consultation, program planning and research. Interviews conducted helped contextualize the perceived degree of change, the attitudes towards the change and the beliefs about the change. School psychologists agreed there has been a significant decrease in the assessment area and change in focus from special education towards an increased focus on regular education. There was also agreement that the roles of consultation and program planning have increased with the systemic

and procedural changes occurring in the schools. School psychologists had mixed views on barriers and empowerments towards making changes. Those who felt hampered reported a lack of agency and support from higher echelons while school psychologists who felt empowered reported support and encouragement from upper level administrators.

CHAPTER V

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

The purpose of this study was to investigate the transformations of school psychologists' roles and practice in Georgia's schools in light of the historical roles of school psychologists and the most recent changes in special education law IDEA 2004 and NCLB 2001. A comparison was made of actual role involvement and practices reported from Kimball's (1998) research data in Georgia using his survey modified with additional questions added to gather information on more recent role areas with regard to response-to-intervention (RtI) and Georgia's pyramid of interventions (POI). The investigation also examined how the experiences of the veteran psychologists perceived current changes in roles and practice, investigated barriers and empowerments to change and examine future roles in the field in service to the students and the schools.

This study used a modified version of Kimball's (1998) Georgia School Psychology Survey (GSPS). The study utilized a sample size of 444 school psychologist and members of the Georgia Association of School Psychologists. These school psychologists of interest were contacted by email and then via a mail follow-up request asking them to complete an on-line survey. The survey response rate for this study was 250 respondents which was a 56.3% rate of return. Comparisons were made between Kimball's (1998) results and the current obtained results. Semi-structured interviews were also conducted with 15 veteran psychologists from small, medium and large school systems to help contextualize the perceptions, attitudes and feelings of school psychologists in Georgia regarding changes in the field today.

Direct comparisons were made between current respondents and Kimball's (1998) research to investigate changes in the reported level of involvement in five broad role areas

assessment, consultation, program planning and evaluation, research and direct services.

Comparisons were also made between current respondents and Kimball's (1998) results of practice and demographic aspects of the state of the school psychology field in Georgia.

The study addressed two overarching research questions. The study examined to what degree school psychologists' roles and practices in Georgia have changed when compared with the results of Kimball's (1998) and other studies. The research also investigated the perceptions, attitudes and feelings of veteran school psychologists in Georgia regarding role and practice changes in the field today. Several comparisons were made with Kimball's (1998) results including demographic information, work settings, certification type, student to psychologist ratio, labor type, degree of job satisfaction and level of involvement in the five role areas. Also included in this research was hours spent weekly in five role areas to compare with other national and state studies.

Summary and Discussion of Research Findings

Early school psychologists focused on educational processes, developing assessment instruments and on special student populations resulting in century long ties with the field of school psychology. Criticisms of special education and the failures of current assessment practices and role reification for school psychologists began in the middle 1970's as quickly as the federal special education legislation was introduced in 1975. Curriculum theorists criticized the education science and national standards movements as limiting for the expansion of knowledge and the good of the education process in America. Yet this was the direction that education, curriculum and school psychologists' roles were moving. This current research measured significant changes in roles for school psychologists based on the most recent legislative shifts in education with IDEA 2004 and NCLB 2001. Practice and demographic shifts

were also measured. Role change included a lower level of involvement in assessment and reported increased levels of involvement in consultation, program planning and evaluation and research. Interview data confirmed the role shifts as psychologists noted a felt decrease in the referral and testing rates for special education and increased opportunities for consultations, program planning and research in regular education areas because of RtI and POI in Georgia.

Demographic and Practices Changes

The current research noted an increased minority representation of school psychologists in Georgia more in line with national results (Hosp & Reschly, 2002). Kimball's (1998) research noted that fewer school psychologists had reported themselves as African American (3%) compared to the current respondents (10.9%). School psychologists are increasing in racial diversity compared with 12 years ago. The changes in diversity may be an indication of efforts towards recruitment of minorities by NASP, GASP and training programs within the state universities which began in the middle 1990's. The gender of school psychologists remains predominantly female at 80.3% compared to Kimball's 81.8%. This trend is predicted to continue by Curtis et al. (2004) through 2020.

While the predominant ratio of school psychologist to students remains consistent with the funding levels in Georgia of 1:2475, there were differences noted at the upper and lower ends of the reported ratios when compared with Kimball's (1998) results. The ratios of school psychologist to student suggested a lowering trend when compared with Kimball's results. Kimball's percentage above 1:3000 students was 24.5% while current school psychologists reported only 15.4%. Additionally, school psychologists reporting ratios below 1:1500 students increased from a reported 32.0% in 1998 to 40.8% in 2010.

This reduction of ratios includes hiring of additional psychologists in Georgia through local and state funds. Larger systems have access to greater state funding as well as local revenue to hire personnel. The ratio reduction also may be a partial by-product of school psychologists' locations moving more towards school based service, a dramatic shift from 12 years ago. Slightly less than half of the respondents, 43.1%, reported being school based as compared to only 3.2% in 1998. This increase in school based services may suggest increased awareness of or potential for collaborative efforts as suggested by research (Kramer & Epps, 1991; McAfee, 1988; Ysseldyke, 2006). It may also signal a shift in agency and in personnel control from board level (under special education or pupil services administration) to school level (under principals) for the school psychologists. This shift, while increasing collaborative opportunities with faculty, students and parents, also could have unintended consequences with school psychologists serving multiple supervisors with multiple agendas and conflicting interests. Interview data indicated that the leadership and administration directly influenced school psychologists' ability to change in roles and practice by empowering or creating barriers to that change. As the school psychologists shift to the school level this agency and the relationships with administrators may become even more important. Conoley and Gutkin (1995) noted that too few school psychologists conceive of themselves as change agents. The field needs to determine its own direction rather than being caught in a hegemonic maelstrom.

There was noted aging in the field and in the current labor force for school psychologists in the state of Georgia. This agreed with the Curtis et al. (2004) study that portended a declining available workforce due to impending retirements through 2010 to 2020. Almost a quarter of the respondents (23.0%) are within four years of potential retirement from the school system according to these results and approximately half (49.6%) of the respondents are in the 16-20

year range as compared to 45.5% in 1998. Additionally, those holding the leadership certification (19% reported) could potentially impact the school psychologist force as those choosing administrative or other leadership positions may leave practitionership. The current educational system transformation is blending outcomes based education, RtI and the tiers of support for students and is transferring specialized and individualized instruction downward into regular education from special education. This change may ultimately absorb many special education functions into a regular education process which would suggest that school psychologists and the field needs to adapt and investigate their usefulness to all students and to the learning process.

Those working today reported an increased level of satisfaction overall when compared to 1998. While analysis revealed no significant differences in overall satisfaction between 1998 and 2010, there appeared to be an increase in the upper and lower limits of satisfaction reported. The number of school psychologists who reported feeling extremely satisfied and extremely dissatisfied was greater than reported 12 years ago. This bifurcation trend suggests stronger feelings associated with the degree of comfort for those in the field experiencing role and practice changes. It was also reflected in the interviews with veteran psychologists. As reported in Table 10, those comfortable with the changes reported more satisfaction (extremely satisfied=12.9%) while those uncomfortable with the changes reported more dissatisfaction (extremely dissatisfied=3.6%).

Role Changes and Barriers

The research and commentary from the 1980's through the present advocated for changes in roles and practice for school psychologists within the public schools towards preventative roles. Many voices, including Reschly (1988, 2000), Will (1988), Conoley and Gutkin (1995), Bradley-Johnson et al. (1995), Reschly and Wilson (1995), Cantor (2006), Fuchs and Vaughn

(2006) and others have advocated for a changing picture for school psychologists in the schools. NASP has advocated for a change in psychological services through the Blueprint publications (Ysseldyke et al., 1984, 1997, 2006). In various forms, the researchers and commentaries have called for expansion of services to all students in regular and special education and to expand roles from the test-and-place roles to the prevent-and-intervene roles. To accomplish this, school psychologists needed to integrate into the school climate and serve at the school level as this study has shown.

At this time, studies on roles and practices have reported that assessment remains a primary role in school psychology practice and suggested that theory has still not moved into practice (DeSimone, 1999; Hosp & Reschly, 2002; Kimball, 1998; Meacham & Peckham, 1978; Roberts & Rust, 1994; Reschly & Wilson, 1995; Smith, 1984). Examining the reported percentage of time spent weekly, in roles, by school psychologists in Georgia (on Table 12) and comparing them with other state and national studies (on Table 3), the results noted a role shift for school psychologists in Georgia from earlier national studies. The percentage time spent in the roles of assessment, consultation, research and program planning and evaluation reflected percentages which are similar to other state and national studies. Direct services fell below state and nationally reported trends with the exception of Florida. This role involvement shift agreed with Reschly's (1988) and Tractman's (1981) early appeals to expand services focus from test-and-place to a pre-referral regular education focus.

While assessment remains a predominant role for school psychologists, there has been significant movement away from assessment when comparing Kimball's (1998) results with the modified survey results used in this study. A partial contribution to that shift may be because school psychologists are not engaged in the newer duties within RtI which are focused more on

regular education. Interviews suggested it may also be an indication of a lack of support by upper echelons in the schools allowing school psychologists' roles to change. The assessment role on the survey included novel duties such as engaging in school wide universal screenings and prescriptive screenings for regular education students. Assessment decline may be a reflection on the reluctance of the school psychologist to engage in these activities. This reluctance may imply a lack of foresight by the field to the need for role flexibility and adaptation.

Interview responses affirmed that the number of assessments and referral rates had decreased while consultation and program planning and evaluation had increased for many. This movement towards increasing involvement in other roles including consultation, program planning and research indicated by these findings agreed with Cantor (2006), Fuchs and Vaughn (2006) and Tilly (2008) in establishing preventative interventions. The direction of role change agreed with Roberts' and Rust's (1994) study of role directions measured in the examination of Iowa school psychological services which had pioneered a pre-referral/intervention service model. It also reflected a role movement in the same direction with other state and national studies (DeSimone, 1999; Hosp & Reschly, 2002; Reschly & Wilson, 1995). However, interviews also noted that a theme emerged about uncertainties felt in the school system as to the changes occurring due to the lack of guidance by the administration, limited agency of school psychologists and by limited state direction in shaping the initial changes. These limitations are likely contributors to limiting potential shifts and changes in roles for school psychologists.

Regarding barriers to change, Willis's (2000) study suggested that assessment as a dominant role presented limited opportunity for role and practice change. Within that system, the reified assessment role had become a source of job stress and strain. Further contextualization noted that school psychologists felt powerless, devalued and angry. Primary contributors to those

feelings included lack of agency, workloads and lack of support in the work environment due to the school system's power structure and the union contracted agreements which had hampered any effective change efforts.

This study's results noted agency barriers by interviewees, indicating in some cases, a lack of support, lack of willingness and limited upper echelon level support in some counties. The feelings about the change in roles were dependent on the administrative leadership and support in the work environment and the established power structure. Limited administrative support led to resistance by teachers and schools towards attempts at change by the school psychologists or those tasked with implementing the role and process changes in some systems. The lack of support by administrators was seen as disempowering by the school psychologists. The lack of felt support may have also partially contributed to the reported feelings of inadequacy, nervousness and frustration while experiencing the changes from NCLB 2001 and IDEA 2004. However, where administration supported the process the reports were positive in regards to implementing change. Those school psychologists who felt supported reported more empowerment to change and perceived a broader scope of role and practice opportunities. Recognition of the importance of top-down administrative support, funding and access to training was seen as crucial to build infrastructure for change.

Another barrier theme which emerged included the perceived stakeholders' area of responsibility in systems where RtI was implemented. Some school psychologists reported resistance to role change and the RtI process in general by regular education, the instructional coordinators and principals as it was not viewed by them as a regular education function. The veteran school psychologists predominantly reported that many systems thought RtI was a

function under special education which caused problems of investment by regular education teachers and the schools.

Most school psychologists, whether encountering difficulty with the process or not, were in agreement on perceived positive impacts that the changes in roles and RtI were making on students. Reasons included positive changes in the various broad measures by the schools (CRCT, AYP, disproportionality). However, curriculum theorists would not agree that the focus on standardized test scores was a positive reflection and shift which was beneficial to students (Apple, 2001). A few interviewees perceived negative impacts of RtI. They reported feeling the process was a delay of special education services for students who were believed handicapped. Some looked at whole grades of students and felt that RtI had not helped them with academic improvement. The field needs to keep its' perspective on students-as-individuals and to not become distracted by standardized test scores which may or may not mean something, can be manipulated and/or politicized.

Conclusions

The survey and interview findings of this study reflected several significant changes in the demographics, practices and roles for school psychologists in Georgia. The racial make-up of the school psychologists in Georgia moved towards national trends with increasing minority school psychologists compared with 12 years ago. The practitioner workforce in Georgia appears to be aging as almost one quarter of the respondents reported being within four years of potential retirement. School psychologists of today are as satisfied as those reporting 12 years ago. Approximately 75% are satisfied to a degree compared with approximately 25% dissatisfied. However, those school psychologists on the upper and lower ends of the satisfaction spectrum

also increased, reflecting a divergence and polarization into positive and negative feelings about the changes in roles and practices.

Regarding practice, there has been a shift in the location of school psychologists from having a centralized location within school systems in the state to being school based. About half of the psychologists currently reported being school based at this time. Perhaps this may suggest an increased awareness of the need for increasing collaboration. Collaboration is important as it may also signal a shift in power and who school psychologists will report to. A possible by-product of the school-based services shift was reflected in the school psychologist to student ratios shrinking from 12 years ago. There was a decrease of ratios of students above 3000 and an increase in ratios of students below 1500. This decreasing ratio of school psychologist to student may also be inversely correlated to the increasing school based psychologists.

The current research results, when compared with Kimball's (1998) results, reflects a changing picture in the field for roles within school psychology in Georgia. This change was in the direction of what earlier researchers and models advocated. The analysis of survey results revealed statistically significant and effect size differences from 12 years ago. Decreasing assessment role involvement and increasing role involvement in the areas of consultation, program planning and evaluation and research were noted. The direct services role did not note any significant involvement shifts from 12 years ago.

The interviews reflected further contextualization of the experiences in role and practice changes for school psychologist. First, most reported discomfort with the change initially and had a degree of awareness that the shift with RtI and POI would be large and would need support from regular education and administration to be effective and complete. Second, school psychologists' feelings about the change and their empowerment and barriers suggested that they

felt caught in the middle between the school, special education and the students. Concerns were raised about providing services to children, being caught in the transition process between regular and special education and lacking the power to initiate any change. A lack of funding, additional training needs and lack of support for implementation were also seen as barriers.

Most school psychologists reported that the RtI process was perceived as helping the children and the schools when held against the standard of AYP and CRCT at the elementary school level. The RtI process was reported as impacting role change by decreasing the amount of referrals to special education (thus reducing assessments). School psychologists reported their involvement in the roles of consultation, program planning and research increased and the duties within these roles revolved around the RtI process. Future roles purported for school psychologists included more consultation with staff and parents, more interventions in regular education and increased direct services with children. School psychologists reported spending part of their time spent on the non specific category of *other*. Activities reported for this category included intensive services and support of a few high-focus families and students, performing in supervisory capacities, and providing needed clerical tasks.

Despite calls for change in literature it remained that change seems to have only occurred after hegemonic influence (Bradley-Johnson et al., 1995; Cantor, 2006; Conoley and Gutkin, 1995; Fuchs and Vaughn, 2006; Reschly 1988, 2000; Reschly and Wilson, 1995; Ysseldyke et al., 1984, 1997, 2006). These changes in roles and practices came after legislation and process changes were implemented at federal and state levels rather than through efforts and agency of the school psychologist at local levels. Interview themes suggest limited power by school psychologists and raise questions about the degree of agency in the field. The legislative changes in NCLB 2001 and IDEA 2004 enacted a positivist perspective of education and affirmed

hegemonic influences which were forewarned by many curriculum theorists (Apple & Buras, 2006; Pinar, 2007; Purpel, 2005). Curriculum under hegemonic influence results in a narrowing and reification of curriculum (Dimitriadis & McCarthy, 2001). It remains to be seen if the changes in the field of school psychology will result in a narrowing or deskilling of roles for school psychologists (Apple, 2001).

Implications

While the effect of school psychologists moving towards a school based model for services across Georgia is not clear, it is clear that nearly half have done so since 1998. School based service for the school psychologist helped provide increased opportunity to establish closer working relationships with faculty and students within the schools they serve. As the procedural changes and opportunities for new roles continue to occur, the field may wish to consider what this movement may mean. While, school psychologists will be more integrated into the school community rather than an outsider, this could mean some loss of objectivity as they are now absorbed by the system. This absorption may influence any held agency by the school psychologists. Additionally, supervisory and agency implications and politicizations will affect school psychologists' roles and their flexibility within those roles.

Also concerning is the large segment of school psychologists in Georgia who appear to be within 4 years of potential retirement. Without rising replacements, this would negatively impact services to children in regular and special education and have negative implications for the status of the field. This shortage would likely strain resources of those who are in the field currently and may persist as new recruits are in the education and training pipeline. The state of Georgia Department of Education and university training programs within the state should consider additional support for promulgation of a replacement force for the field as this large

cohort begins retiring. This may be in the form of additional support for minority candidate recruitment as well as critical field funding and scholarships. Action soon on this point is even more salient considering that the field credentials for minimum entry require the highest level of education (Ed.S), compared to other entry level fields which serve students within the schools, and thus take longer to complete.

Despite some apprehension, school psychologists in Georgia need to be ready embrace other roles and look for additional areas with which they meet the schools' and students' needs. Clearly, expansion into consultation, program planning and research suggest avenues for further education and training for the field to provide optimum services in those areas as traditional assessment declines. Psychologists need to become more comfortable with expanding into other duties and with decreasing assessment roles as opportunities arise. Perhaps many school psychologists still view their own roles as heavily tied to assessment and testing only and thus feel discomfort when moving outside of that role area. This will be a danger for the field as flexibility and role migration will be increasingly important as regular education continues to meld with special education under RtI. School psychologists have to be active players, advocating for the field and for the students, as educational transformations occur (Conoley & Gutkin, 1995).

While assessment skills are likely to continue to be a necessary (and needed) role for the field to help answer questions and provide information for decision making and problem solving, the trend is decreasing. The decrease could indicate several possibilities especially when considering that, as reported, not all schools and systems are providing support for school psychologists to make changes. It may indicate that, given some hesitations and lack of

confidence by some, in entering the process and practice changes that some school psychologists have not yet embraced change or that systems are not supporting any change for psychologists.

The field of school psychology is well equipped for the demands placed by legislation including RtI and POI. However, support from upper echelons and administration for expanded roles needs to occur to employ process changes effectively and efficiently. School psychologists reported that the field lacked agency and were reliant on upper echelons of the power structure in schools to accomplish change in role and practice. Upper echelons can empower or hamper school psychologists' roles and funding. Therefore, collaboration and team building are important components necessary for effective change, support and impact on positive transition into novel roles and practices for the school psychologist.

The field of school psychology has some role aspects which may be more difficult to quantify and categorize and yet take up valuable time during a typical work week. The interview research noted that in depth service to specific child and family cases, clerical and supervisory duties were some examples. School psychologists need to be cognizant of these quantifiable difficulties and consider avenues to better portray their usefulness and effectiveness in these necessary areas.

While it is clear that there are role and practice changes occurring, it is not clear if these changes will be positive for the field of school psychology and for the services rendered to the children and school systems in Georgia. Some curriculum theorists would warn that standards constrain rather than expand in the curriculum and broad knowledge base within the schools. Applying this to the field of school psychology one may ask will the role shifts diminish necessary skill sets in assessment or other areas unintentionally?

Recommendations

Based on the findings of this study, this researcher concludes that changes in roles and practices have occurred in 2010 for school psychologists in Georgia when compared with roles and practice in 1998. The following recommendations have been made for additional research and investigation into aspects of the field. These include:

1) A comparison of school psychologists' roles and practices and impacts of the services within Georgia's schools based whether they are under a centralized or school based delivery model. Because so many school psychologists have moved to school based models investigating the effectiveness of these moves and the reasons why they moved would enrich the field and services to children.

2) Investigation into more specific role and practice differences based on the school systems size and funding levels in the county of employment. Does the county size or funding level matter or influence the effectiveness of school psychologists?

3) A further in-depth investigation into field attrition because of retirement and those new school psychologist graduates coming into the arena and what positions they are filling. Does the field have enough replacements to meet the needs of the school and the potential loss of those retiring?

4) A qualitative examination of the impressions and impacts of school psychological services within large, medium and small school systems. How do roles differ among those employed in the different sized systems and how may that influence services to children and the needed training requirements before entering the field?

Limitations

The limitations of this study were as follows:

1) The GSPS survey collected levels of involvement reported by school psychologists for five broad role areas. However, these roles are not all inclusive in the range of roles for school psychologists.

2) Despite an adequate response rate and respondent size, this study used a convenience sample rather than a randomized sample design which may have hampered more generalization of results.

3) The study used an online survey which may have prevented some people from participating because of limited internet skills or lack of access to the internet.

Concluding Thoughts

For a century, school psychologists have had ties to assessment and to special education. These ties have remained strong and were embraced during various periods in history. More recently, proponents of role expansion have sought school psychologists to move towards preventative models and away from test-and-place models so predominant. This included movement away from assessment and special education and towards regular education and on an instructional focus. The findings of these results suggest that type of movement is occurring for the school psychology field in Georgia.

However, assessment, in some form or fashion, will follow the field but the focus may change from special education to all students in education, regular and special. As the changes in roles and practices occur, the field should be cognizant of losing skills and expertise as they shift focus. Apple (1995) and Apple and Buras (2006) would warn of deskilling and of a loss of skill sets. There seems to be an inherent danger in trying to be all things to all people and so broad in skill base that there is a subsequent loss that occurs in any sort of specialization. Bennett (1970) warned that the skills set and impact of psychological services were reliant on the individual

school psychologist rather than the training he or she received. This seems to be a valid argument as the role and practice areas broaden with the Blueprint III and specializations are minimized. There seems to an inherent danger in trying to be all things to all people with unintended consequences in doing so.

Concerns were raised by psychologists interviewed about the lack of agency and the felt lack of support in some systems and schools for change. Resistance to changes and lack of funding were seen as significant barriers to changes for school psychologists. They were caught in the middle in more ways than one. They felt caught with the impending legislative shifts but not able to do initiate changes effectively. They felt pulled in two directions with involvement in RtI and involvement in special education. For any changes to occur in an effective and orderly manner, school psychologists need to be given more individual autonomous authority and need to be supported by the upper echelons of authority within the schools.

REFERENCES

- Afolabi, C., & Eads, G. (2009, April). Research: An overview of Georgia's educator workforce. *Georgia Professional Standards Commission Website*. Retrieved from http://www.gapsc.com/Research/Data_Research.asp.
- Apple, M. (1995). *Education and power*. York, NY: Routledge.
- Apple, M. (2001). *Education the "right" way: Marketing, standards, God and inequality*. New York, NY: RoutledgeFalmer.
- Apple, M., & Buras, K. (Eds.). (2006). *The subaltern speak: Curriculum, power and educational struggles*. New York, NY: Routledge Taylor and Francis Group.
- Anastasi, A. (1988). *Psychological testing* (6th Ed.) New York, NY: Macmillan Co.
- Armstrong, S. (2004). U.S. History, In Brazil, G. & Reed, B. (Eds.). *Student handbook: Biology, calculus, English language, English literature, U.S. government, U.S. history*. (pp. 97-380). Nashville, TN: The Southwestern Company.
- Barkan, E. (1992). *The retreat of scientific racism*. Cambridge, UK: Cambridge University Press.
- Batsche, G. (2006). Problem solving and response to intervention: Implication for state and district policies and practices. *Council for Exceptional Children Website* Retrieved from <http://casecec.org/rti.htm>.
- Belloch, A. (1997). One hundred years of clinical psychology; Roots, doubts and hopes. In Fuller, R., Walsh, P. and McGinley, P. (Eds.). *A century of psychology: Progress, paradigms and prospects for the new millennium*. (pp.85-106). New York, NY: Routledge Taylor and Francis Group.
- Bennett, V. (1970). Who is a school psychologist? (And what does he do?). *Journal of School Psychology*, 8, 166-171.

- Bradley-Johnson, S., Johnson, M., & Jacob-Trimmi, S. (1995). Where will- and where should- changes in education leave school psychology? *Journal of School Psychology, 33*, 187-200.
- Cantor, A. (2006). Problem solving and RtI: New roles for school psychologists. *NASP Communiqué, 34*, pp. 1-3.
- Census Bureau. (2002, November). *Demographic trends of the twentieth century*. Retrieved from <http://www.census.gov/prod/2002pubs/censr-4.pdf>.
- Census Bureau 10. (2008, June). *Census population and housing: 1910 census*. Retrieved from <http://www2.census.gov/prod2/decennial/documents/36894832v1ch02.pdf>.
- Census Bureau 20. (2008, June). *Census population and housing: 1920 census*. Retrieved from http://www2.census.gov/prod2/decennial/documents/41084484v1_TOC.pdf.
- Christ, T., Burns, M., & Ysseldyke, J. (2005). Conceptual confusion within response to intervention vernacular: Clarifying meaningful differences. *NASP Communiqué, 34*, pp. 1, 6-8.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*, (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Conoley, J., & Conoley, C. (1992). *School consultation: Practice and training* (2nd ed.). Needham Heights, MA: Allyn and Bacon.
- Conoley, J., & Gutkin, T. (1995). Why didn't- Why doesn't- School psychology realize its promise? *Journal of School Psychology, 33*, 209-217.
- Cowen, K. (2008). 40 years of excellence in school psychology. *NASP Communiqué, 37*, pp. 1,14.

- Cunningham, W., & Cordeiro, P. (2006). *Educational leadership: A problem solving approach* (3rd ed.). Boston, MA: Pearson Education, Inc.
- Curtis, M., Grier, J. E. & Hunley, S. (2004). The changing face of school psychology: Trends in data and projections for the future. *School Psychology Review*, 33, 49-66.
- Cutts, N. (Ed.). (1955). *School psychologist at mid century*. Washington, D.C.: American Psychological Association.
- Dawson, P. (2003). The uses and misuses of intelligence testing: Part one. *NASP Communiqué*, 32, pp. 37-38, 40.
- DeFour, R., DeFour, R., Eaker, R., & Karhanek G. (2004). *Whatever it takes: How professional learning communities respond when kids don't learn*. Bloomington, IN: National Education Service.
- Deno, S. (1985). Curriculum-based measurement: The emerging alternative. *Exceptional Children*, 52, 219-232.
- Deno, S., & Fuchs, L. (1987). Developing curriculum-based measurement systems for data-based special education problem solving. *Focus on Exceptional Children*, 19, 1-16.
- DeSimone, A. (1999). *A mixed model analysis of perceived role discrepancies of Florida school psychologists*. (Doctoral Dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9918528)
- Dimitriadis, G., & McCarthy, C. (2001). *Reading and teaching the postcolonial: From Baldwin to Basquiat and beyond*. New York, NY: Teachers College Press.
- Doll, W. (1993). *A post-modern perspective on curriculum*. New York, NY: Teachers College Press.

- Ed Performance & Accountability. (2007, July 19). 24th Annual report to congress on implementation of IDEA. Archived 25 year history of IDEA *U.S. Department of Education website*. Retrieved from <http://www.ed.gov/about/reports/annual/osep/2002/index.html>.
- Ed.gov. (2006, October 4). Topic: Identification of specific learning disabilities. *U.S. Department of Education Website*. Retrieved from [http://idea.ed.gov/explore/view/p/,root,dynamic,TopicalBrief,23,.](http://idea.ed.gov/explore/view/p/,root,dynamic,TopicalBrief,23,)
- Ed.gov. (2009, May 6). The federal role in education. *U.S. Department of Education Website*. Retrieved from <http://www.ed.gov/about/overview/fed/role.html>.
- Ed.gov Research. (2006, June 20). Proven methods: Scientific based research. *U.S. Department of Education Website*. Retrieved from <http://http://www.ed.gov/nclb/methods/whatworks/research/index.html>.
- Fagan, T. (1990). A brief history of school psychology in the United States. In Thomas, A. and Grimes, J. (Eds.), *Best practices in school psychology- II*. (pp. 913-929). Washington, DC: The National Association of School Psychologists.
- Fagan, T. (1995). Trends in the history of school psychology in the United States. In Thomas, A. and Grimes, J. (Eds.), *Best practices in school psychology- III*. (pp. 59-67). Washington, DC: The National Association of School Psychologists.
- Fagan, T., & Warden, P. (Eds.). (1996). *Historical encyclopedia of school psychology*. Westport, CT: Greenwood Press.
- Fagan, T., & Wise, S. (1994). *School psychology: Past, present and future*. White Plains, NY: Longman Publisher.

- Fagan, T., & Wise, S. (2007). School psychology timeline. *National Association of School Psychologists Website*. Retrieved July 25, 2009 from <http://www.nasponline.org/history/timeline.aspx>.
- Feuer, M., Towne, L., & Shavelson, R. (2002). Scientific Culture and Educational Research. *Educational Researcher*, 31, 4-14.
- Feuerverger, G. (2007). *Teaching, learning and other miracles*. Rotterdam, Netherlands: Sense Publishers.
- Fletcher-Janzen, E. (2007, October). *Moving beyond the discrepancy model: Using RTI and neuroscience to determine SLD*. Paper presented at the Fall conference meeting of The Georgia Association of School Psychologists, Savannah, GA.
- French, J. (1992, August). *The influence of school psychologists in APA and on APA*. Paper presented at the meeting of the annual convention of the American Psychological Association, Washington, D. C.
- Frisby, C. (1990). Toward a broader role for school psychology in the thinking skills movement. *School Psychology Review*, 19, 96-114.
- Fuchs, L., & Vaughn, S. (2006). Response-to-intervention as a framework for the identification of learning disabilities. *NASP Communiqué*, 34, 1,4-6.
- Gardner, D., Larson, Y., Baker, W. & Campbell, A. (1983). *A nation at risk: The imperative for education reform*. [Electronic Version]. Government Printing Office: Washington, D.C. (ERIC Document Reproduction Service No. ED226006).
- Gay, L., & Airasian, P. (2000). *Educational research: Competencies for analysis and application*, (6th ed.). Upper Saddle River, NJ: Prentice- Hall, Inc.

- Georgia Association of School Psychologists. (2008). *Response to intervention: How your school psychologist can assist*. [Brochure]. Macon, GA: author.
- Georgia Department of Education. (2008, February). *Student support teams (SST): A resource manual*. Atlanta, GA: author.
- Georgia Department of Education. (2009). *Local, state and federal revenue report: Fiscal year 2009*. Atlanta, GA: author. [Electronic Version] Retrieved January 19, 2010 from http://app.doe.k12.ga.us/ows-bin/owa/fin_pack_revenue.display_proc.
- Gilmore, G., & Chandy, J. (1973). Educators describe the school psychologist. *Psychology in the Schools*, 10, 397-403.
- Goddard, H. H. (1922). *Human efficiency and levels of intelligence*. Princeton, NJ: Princeton University Press.
- Gould, S. (1981). *The mismeasure of man*. New York, NY: WW Norton & Company.
- Gray, S. (1963). *The psychologist in the schools*. New York, NY: Holt, Rinehart and Winston, Inc.
- Hallahan, D., & Mercer, C. (2001). Learning disabilities: Historical perspectives. *National Research Center on Learning Disabilities Website*. Retrieved from <http://www.nrcld.org/resources/ldsummit/hallahan.pdf>.
- Harperbury Hospital. (n.d.). *The national health service website*. Retrieved from <http://www.learningdisabilityhistory.com/>.
- Heidegger, M. (1977). *The question concerning technology and other essays*. New York, NY: Harper & Row Publishers.
- Herrnstein, R., & Boring, E. (1965). (Eds.). *A source book in the history of psychology*. Cambridge, MA: Harvard University Press.

- Hosp, J., & Reschly, D. (2002). Regional differences in school psychology practice. *School Psychology Review*, 31, 11-29.
- James, W. (1899) *Talks to teachers on psychology: And to students on some of life's ideals*. Boston, MA: Geo. H. Ellis and Co.
- James, W. (1920). *Collected essays and reviews*. New York, NY: Longmans, Green and Co.
- Kimball, L. (1998). Role expectations for school psychologists held by principals and school psychologists. *Dissertation Abstract International*, 59, 3349.
- Kirk, S., Gallagher, J., & Anastasiow, N. (1993). *Educating exceptional children, Seventh ed.* Dallas, TX: Houghton Mifflin Co.
- Kliebard, H. (2004). *The struggle for American curriculum* (3rd ed.). New York, NY: RoutledgeFalmer Publisher.
- Kramer, J., & Epps, S. (1991). Expanding professional opportunities and improving the quality of training: A look toward the next generation of school psychologists. *School Psychology Review*, 20, 452-461.
- Krejcie, R., & Morgan, D. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- LBJ Museum. (n.d.). The president's daily diary April 11, 1965 page 3. *Lyndon Baines Johnson Library and Museum Website*. Retrieved from <http://www.lbjlib.utexas.edu/johnson/archives.hom/diary/1965/650411-3.asp>.
- Lemann, N. (2000). *The big test: The secret history of the American meritocracy*. New York, NY: Farrar, Strauss and Giroux Publishers.
- Lesko, N. (2001). *Act your age!: A cultural construction of adolescence*. New York, NY: RoutledgeFalmer.

- Lewontin, R., Rose, S., & Kamin, L. (1984). *Not in our genes: Biology, ideology, and human nature*. New York, NY: Pantheon Books.
- Lindborg, S., & Egeland, B. (1987). Psychology in the schools training programs at the university of Minnesota. *Professional School Psychology, 2*, 67-74.
- Lowry, R. (1998) Role expectations and functions of school psychologists in Virginia: A ten year follow-up. *Dissertation Abstract International, 59*, 725.
- Lundin, R. (1991). *Theories and systems of psychology*. Lexington, KY: D.C. Heath and Company.
- Manon, P. (2006). G. Stanley Hall: Psychologist and early gerontologist. *American Journal of Public Health, 96*, 1161.
- Marshall, C., & Rossman, G. (1999). *Designing qualitative research* (3rd ed.). Thousand Oaks, CA: Sage Publications Inc.
- Marzano, R., Pickering, D., & Pollock, J. (2001). *Classroom instruction that Works: Research-based strategies for increasing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McAfee, P. (1988). Role expectations of school psychologists. *Dissertation Abstract International, 49*, 2591.
- Meachum, M., & Peckham, P. (1978). School psychologists at three quarters century: Congruence between training, practice, preferred role and competence. *Journal of School Psychology, 16*, 195-206.
- Melville, N. (1917). *Standard method of testing juvenile mentality*. Philadelphia, PA: The Washington Square Press.

- Mondale, S., & Patton, S. (Eds.), (2001). *School: The story of American public education*. Boston, MA: Beacon Press.
- Monroe, M. (1932). *Children who cannot read*. Chicago, IL: The University of Chicago Press.
- Nardi, P. (2003). *Doing survey research: A guide to quantitative methods*. Boston, MA: Pearson Education, Inc.
- National Association of School Psychologists. (1992). *Standards for the provision of school psychological services*. Washington, DC: Author.
- National Association of School Psychologists. (2000). Professional Conduct Manual. *School Psychology Review*, 29, 618-638.
- National Association of School Psychologists. (2010). Model for comprehensive and integrated school psychological services. *Best Practices in School Psychology V*. Washington, DC: Author.
- National Association of School Psychologists. (2010). *NASP approved/ nationally-recognized graduate programs in school psychology*. Retrieved from <http://www.nasponline.org/certification/naspapproved.aspx>.
- Ng-A-Fook, N. (2007). *An indigenous curriculum of place: The united Houma Nation's contentious relationship with Louisiana's educational institutions*. New York, NY: Peter Lang Publishing.
- O'Conner, E., Macomber, M., & Smith, M. (2006, October). *Using data to guide instructional decisions in a problem solving model*. Paper presented at the meeting of the National CASE conference, Savannah, GA.
- Opp, G. (1994). Historical roots of the field of learning disabilities: Some nineteenth century German contributors. *Journal of Learning Disabilities*, 27, 10-19.

Orton, S. (1937). *Reading, Writing and Speech Problems in Children*. New York, NY: W.W.

Norton and Company.

Paisley, P., & Borders, D. (1995). School counseling: An evolving specialty. *Journal of School*

Counseling and Development, 74, 150-153.

Pajares, F. (2007). Culturalizing educational psychology. In Sahili, F., & Hoosain, R. (Eds.).

Culture, motivation and learning: A multicultural perspective. (pp.19-42). Charlotte, NC:

Information Age Publishing.

Paris, K. (1994). Summary of goals 2000: Educate America act. *North Central Regional*

Educational Laboratory Website. Retrieved July 26, 2009 from

<http://www.ncrel.org/sdrs/areas/issues/envrnmnt/stw/sw0goals.htm>.

Patton, M. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA:

Sage Publications.

Paschal, F. (1918). *The Witmer cylinder test*. Published Thesis, University of Pennsylvania,

Hershey, PA: The Hershey Press.

Pinar, W. (2004). *What is curriculum theory?* Mahwah, NJ: Lawrence Erlbaum Associates

Publishers.

Pinar, W. (Ed). (2007). *Intellectual advancement through disciplinarity: Verticality and*

horizontality in curriculum studies. Rotterdam, Netherlands: Sense Publishers.

Purpel, D. (2005). *Moral outrage in education*. New York, NY: Peter Lang Publishing, Inc.

Reed, R., & Johnson, T. (2000). *Philosophical Documents in Education* (2nd ed.). New York,

NY: Addison-Wesley Longman.

Reilly, D. (1973). School psychology: View from the second generation. *Psychology in the*

Schools, 10, 151-155.

- Reschly, D. (1988). Special education reform: School psychology revolution. *School Psychology Review, 17*, 459-475.
- Reschly, D. (2000). The present and future status of school psychology in the United States. *School Psychology Review, 29*, 507-522.
- Reschly, D. (2003). *What if LD identification changed to reflect research findings?* Paper presented at the National Research Center on Learning Disabilities symposium. Retrieved from <http://www.nrld.org/symposium2003/reschly/reschly5.html>
- Reschly, D., Kicklighter, R., & McKee, P. (1988). Recent placement litigation part II, minority enr overrepresentation: Comparison of Larry p. (1979, 1984, 1986) with Marshall (1984, 1985) and s-1 (1986). *School Psychology Review, 17*, 22-38.
- Reschly, D., & Wilson, M. (1995). School psychology practitioners and faculty: 1986 to 1991-1992 trends in demographics, roles, satisfaction and system reform. *School Psychology review, 24*, 62-80.
- Richardson, R. (2006). *William James: In the maelstrom of American modernism*. New York, NY: Houghton Mifflin Company.
- Riley-Taylor, E. (2002). *Ecology, spirituality and education*. New York, NY: Peter Lang Publishing.
- Roberts, A., & Rust, J. (1994). Role and function of school psychologists, 1992-93: A comparative study. *Psychology in the Schools, 31*, 113-119.
- Roberts, R. (1970). Perceptions of actual and desired role functions of school psychologists by psychologists and teachers. *Psychology in the Schools, 7*, 175-178.
- Robinson, D. (Ed.). (1977). *Comparative psychology, volume I, W. M. Wundt*. Washington, DC: University Publications of America.

- Rogers, B., & McAfee, P. (2005, March). *Medications dispensed to elementary and middle school students pre/post 9-11*. Poster session presented at annual meeting of the National Association of School Psychologists, Atlanta, GA.
- Roy, K. (2003). *Teachers in nomadic spaces: Deleuze and curriculum*. New York, NY: Peter Lang Publishers
- Sattler, J. (1992). *Assessment of children* (3rd ed.). San Diego, CA: Jerome Sattler Publisher, Inc.
- Sheridan, S., & D'Amato, R. (2004). Partnering to chart our futures: School psychology review and school psychology quarterly combined issue on multisite conference on the future of school psychology. *School Psychology Review*, 33, 7-11.
- Sheridan, S., & Gutkin, T. (2000). The ecology of school psychology: Examining and changing our paradigm for the 21st century. *School Psychology Review*, 29, 485-502.
- Short, R., & Rosenthal, S. (1995) Expanding roles or evolving identity? Doctoral school psychologists in school vs. nonschool practice settings. *Psychology in the Schools*, 32, 296-305.
- Slattery, P. (1995). *Curriculum development in the postmodern era*. New York, NY: Garland Publishing, Inc.
- Smith, D. (1984). Practicing school psychologists: Their characteristics, activities and populations served. *Professional Psychology: Research and Practice*, 15, 798-810.
- Smith, F. (1998, April). *IDEA: Where do we go from here?*. Paper presented at the meeting of the Georgia Association of School Psychologists, Jekyll Island, GA.
- Snowling, M. (1996). Dyslexia: A hundred years on. *British Medical Journal Website*. Retrieved from <http://bmj.bmjournals.com/cgi/content/full/313/7065/1096>.
- Sprinthall, R. (2007). *Basic statistical analysis, eighth edition*. Boston, MA: Allyn and Bacon.

- Stoner, G., & Green, S. (1992). Reconsidering the scientist-practitioner model for school psychology practice. *School Psychology Review, 21*, 155-166.
- Sumara, D. (2002). *Why reading literature in school still matters: Imagination, interpretation and insight*. Mahwah, NJ: Lawrence Erlbaum Publishers, Inc.
- Talley, R. (1995). Best practices in APA policy and advocacy for school psychology practice. In Thomas, A. and Grimes, J. (Eds.), *Best practices in school psychology- III*. (pp. 191-199). Washington, DC: The National Association of School Psychologists.
- Takaki, R. (1993). *A different mirror*. New York, NY: Little Brown and Company.
- Thomson, I. (2005). *Heidegger on ontotheology: Technology and the politics of education*. Cambridge, NY: Cambridge University Press.
- Thorndike, E.L. (1912). *Education*. New York, NY: Macmillan Co.
- Thorndike, E.L. (1914). *Educational psychology*. Syracuse, NY: Mason Printing Corporation.
- Tilly, D. (2008). The Evolution of school psychology to science-based practice: Problem solving and the three-tiered model. In Thomas, A and Grimes, J. (Eds.), *Best practices in school psychology- V, Vol. 1*. (pp. 17-36). Washington, DC: The National Association of School Psychologists.
- Trachtman, G. (1981). On such a full sea. *School Psychology Review, 10*, 138-181.
- Wallin, J.E. (1924). *The education of handicapped children*. Cambridge, MA: The Riverside Press.
- White, M., & Harris, M. (1961). *The school psychologist*. New York, NY: Harper and Brothers.
- Whitehead, A. (1929). *The Aims of education and other essays*. New York, NY: The Free Press.
- Will, M. (1988). Educating students with learning problems and the changing role of the school psychologist. *School Psychology Review, 17*, 476-478.

- Willis, D. (2000). School psychologists perceptions of current changes in their field. *Dissertation Abstract International*, 61, 2598.
- Workforce. (2009, April). An overview of Georgia's educator workforce: Georgia professional standards commission. *Georgia Professional Standards Commission website*. Retrieved from http://www.gapsc.com/Research/2008_Report/AnOverviewOfGeorgia%27sEducatorWorkforce2008.pdf.
- Ysseldyke, J., Burns, M., Dawson, P., Kelley, B., Morrison, D., Ortiz, S., Rosenfield, S., & Telzrow, C. (2006). *School psychology: A blueprint for training and practice III*. Bethesda, MD: The National Association of School Psychologists.
- Ysseldyke, J., Dawson, P., Lehr, C., Reschly, D., Reynolds, M., & Telzrow, C. (1997). *School psychology: A blueprint for training and practice II*. Bethesda, MD: The National Association of School Psychologists.
- Ysseldyke, J., Reynolds, C., & Weinberg, R. (1984). *School psychology: A blueprint in training and practice*. Washington, DC: The National Association of School Psychologists.
- Zenderland, L. (2001). *Measuring minds: Henry Goddard and the origins of American intelligence testing*. Cambridge, MA: The Cambridge University Press.
- Zimmerman, T. (1997). Plessy v. Ferguson. *Bowling Green State University website*. Retrieved from <http://www.bgsu.edu/departments/acs/1890s/plessy/plessy.html>.
- Zirkel, P. (2008, February). RTI: A snapshot of state law one year after the IDEA regulations. *NASP Communiqué*, 36, 35-36.

Appendix A
Georgia School Psychology Survey

Part 1. Circle the number on the scale to the left of each statement to rate your actual involvement in each activity.

Use the following numeric scale to rate your level of involvement.

1= No Involvement 2= Very Little, 3= Little, 4= Some, 5= Much, 6= Total Involvement

None	Level of Actual Involvement	Total	School Psychologist Activities			
1	2	3	4	5	6	(1) Assessing students via formal and informal test and procedures.
1	2	3	4	5	6	(2) Providing written assessment feedback to school personnel.
1	2	3	4	5	6	(3) Providing verbal assessment feedback to school staff and/ or parents.
1	2	3	4	5	6	(4) Assessing schools via universal screenings.
1	2	3	4	5	6	(5) Assessing individual students in need of prescriptive remediations.
1	2	3	4	5	6	(6) Consulting with teachers and/ or student support teams to develop pre-evaluation strategies to address students' needs.
1	2	3	4	5	6	(7) Providing in-service presentations to school staff, parents and community members.
1	2	3	4	5	6	(8) Serving as liaisons to outside agencies (Mental Health, physicians, private counselors, etc.).
1	2	3	4	5	6	(9) Consulting with intervention teams regarding progress monitoring data.
1	2	3	4	5	6	(10) Consulting with county level assessment and measurement regarding data collection and analysis.
1	2	3	4	5	6	(11) Serving on committees making educational decisions (curriculum development, staff development, reorganization, etc.).
1	2	3	4	5	6	(12) Evaluating progress towards goals on students' Individualized Education Programs.
1	2	3	4	5	6	(13) Evaluating the effectiveness of instructional methods, materials or programs.
1	2	3	4	5	6	(14) Evaluating the effectiveness of academic/ behavioral interventions/ programs/ positive supports towards student success and/ or AYP.
1	2	3	4	5	6	(15) Evaluating the efficacy of crisis intervention plans, procedures and protocols at the county and/ or the school level.
1	2	3	4	5	6	(16) Conducting research to establish general education knowledge.
1	2	3	4	5	6	(17) Conducting research to help solve local school related problems.
1	2	3	4	5	6	(18) Disseminating research results for local practical applications.
1	2	3	4	5	6	(19) Developing and collecting local normative data for academic/ behavioral application.
1	2	3	4	5	6	(20) Conducting analysis of disciplinary data on the county and/ or school level for practical applications.
1	2	3	4	5	6	(21) Providing counseling service to students and/ or families as needed.
1	2	3	4	5	6	(22) Providing crisis intervention services for students (student or staff death, natural disaster, etc.).
1	2	3	4	5	6	(23) Mediating conflicts between and among teachers and parents concerning students' needs.
1	2	3	4	5	6	(24) Providing mentoring/ implementation of positive behavior supports for students as needed.
1	2	3	4	5	6	(25) Providing classroom modeling of intervention/ technique for students as needed.

Use the following numeric scale to rate your level of satisfaction.

1= Extremely Dissatisfied 2= Dissatisfied, 3= Slightly, 4= Slightly, 5= Satisfied, 6= Extremely Satisfied

1	2	3	4	5	6	How satisfied are you with your current role functions in your job?
---	---	---	---	---	---	---

Part 2. Please circle the appropriate letter:

- | | |
|---|--|
| <p>1. Gender</p> <p>a. Female</p> <p>b. Male</p> <p>2. Race</p> <p>a. African-American</p> <p>b. Caucasian</p> <p>c. Hispanic-American</p> <p>d. Asian- American</p> <p>e. Other</p> <p>3. Psychologist to Student Ratio</p> <p>a. 1 to 1000 or less</p> <p>b. 1 to 1001-1500</p> <p>c. 1 to 1501-2000</p> <p>d. 1 to 2001- 2500</p> <p>e. 1 to 2501-3000</p> <p>f. 1 to 3000-3500</p> <p>g. 1 to 3501 or more</p> <p>4. Certificate Level/ Type (circle all that apply)</p> <p>a. 5 year S L</p> <p>b. 6 year S L</p> <p>c. 7 year S L</p> <p>if 7 year: PhD EdD PsyD Other</p> <p>Key: S=specialist, L=leadership</p> | <p>5. Total years as a school psychologist</p> <p>a. 0 to 3</p> <p>b. 4 to 7</p> <p>c. 8 to 15</p> <p>d. 16 to 20</p> <p>e. 20 to 25</p> <p>f. 26+</p> <p>6. Total years in K-12 education</p> <p>a. 0 to 3</p> <p>b. 4 to 7</p> <p>c. 8 to 15</p> <p>d. 16 to 20</p> <p>e. 20 to 25</p> <p>f. 26+</p> <p>7. Your Employment Service Model</p> <p>a. School Based</p> <p>b. Centralized Office</p> <p>c. Contracted Services</p> <p>d. RESA services</p> <p>e. Other _____</p> |
|---|--|

Part 3. Please fill in the blank(s).

- | | |
|---|---|
| <p>1. Estimated <i>Weekly</i> Hours Spent in Role</p> <p>a. Assessment _____ hrs</p> <p>b. Consultation _____ hrs</p> <p>c. Program Planning /Implementation _____ hrs</p> <p>d. Research _____ hrs</p> <p>e. Direct Services _____ hrs</p> <p>f. Other _____ _____ hrs</p> <p>2. Labor Hours Per Week- Check One:</p> <p><input type="checkbox"/> Full Time <input type="checkbox"/> ¾ Time <input type="checkbox"/> ½ Time</p> | <p>3. Please Fill in Your GASP Region _____</p> <p>OR Zip Code of Employment _____</p> <p>Check all that apply- <input type="checkbox"/> GASP Member</p> <p> <input type="checkbox"/> NASP member</p> <p> <input type="checkbox"/> APA member</p> <p> <input type="checkbox"/> Licensed in GA</p> <p>4. Volunteer for Interview. (10+ yrs in field?)</p> <p>Name: _____</p> <p>Phone Number: _____</p> <p>Email: _____</p> <p>Work County: _____</p> <p>Work Title: _____</p> |
|---|---|

Thank you for your participation in this important survey!

Appendix B Interview Questions

I want to think about the general school psychology role areas of assessment, consultation, program planning, direct service and research and how you have been involved in them.

1. Take a moment to think about your various roles in your work settings. Please describe the types of roles you have had as a school psychologist over your career? How have your roles expanded or changed over time?
2. Thinking about the recent shift to RtI and the POI in your school system. How have recent changes impacted your roles as a school psychologist in your system?
3. Think about the process of shifting to RtI and the POI in your school system. What has been your experience in helping to shape this new process and how did it impact the students in school?
4. Thinking about the changes to RtI and the POI in your school system. What have been your perceptions of this change? How have the changes made you feel in your roles as a school psychologist?
5. Please describe your professional efforts at role expansion in your work setting as a school psychologist? What empowered you to make those changes?
6. Considering the recent legislative revisions including RtI, NCLB and IDEA in education please describe what types of impacts we as a field are making on children in the schools.
7. What do you see as potential roles for school psychologists?
8. Considering the time spent each week in your job roles using the categories on the survey what would you say fell under the category of other that did not fall under the 5 specific categories?

Appendix C
Letter to Dr. Lewis Kimball

Bruce Rogers
1703 Berkshire Lane
Statesboro, GA 30461
Home (912) 587-5566
Cell (912) 687-2060

Dr. Lewis Kimball
110 McCormick Place
Brooklet, GA 30415

Dear Lewis,

This letter is written as follow up to our pleasant telephone conversation. As you know, I am pursuing my Ed.D. in curriculum studies. I have been interested in examining how early “school” psychology has impacted and influenced education as well as the school psychologists changing roles in the schools over time. I felt this was especially important with the recent shift in IDEA and our roles in response to intervention as modeled in Georgia’s tiers of interventions.

Your dissertation on the role expectations was timely and your survey used in the study was especially interesting and relevant as our roles shift over time. I was hoping to re-use your survey in my research to compare the findings of current roles reported by psychologists today. This 10-year follow-up would be an interesting measurement of the changes in roles as the tiers of intervention become more established in Georgia. As well, I am hoping to conduct interviews with veteran psychologists to allow them to tell their story regarding the changes in our field that they have seen in Georgia which have impacted our roles and our effectiveness.

My hope is that this research will help identify trends and further amplify the direction of psychologists in the future and highlight the positive changes in our field while negate those roles which may be hurting our cause.

It was nice to speak with you and congratulations again on your well deserved retirement. I wanted to formally thank you for your friendship on a personal and professional level. You were my first supervisor when I entered the school psychology profession and your insight, suggestions and challenges have helped me grow in my journey in this profession. The work conditions were challenging and yet we always managed to also have fun! I want to sincerely thank for that opportunity and for a great start in this field!

If you have any questions, you can contact me at the above address or phone number. My advisor at Georgia Southern is Cordelia Zinskie. Her contact information is below. I look forward to hearing from you in the future.

Sincerely,

Bruce Rogers, Ed.D. Candidate

Advisor- Cordelia Zinskie, Ed.D.
Chair- Dept. of Curriculum, Foundations, and Reading
Georgia Southern University
P. O. Box 8144
Statesboro, GA 30460
Phone: (912) 478-0672

Appendix D
Approval of Survey Use Form

Bruce Rogers
1703 Berkshire Lane
Statesboro, GA 30461
Home (912) 587-5566
Cell (912) 687-2060
bruce@gaspnet.org

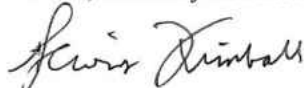
Dr. Lewis Kimball
110 McCormick Place
Brooklet, GA 30415

Dear Dr. Kimball,

This is a permission form to use your developed survey. If you could please check the block you wish, either granting or denying permission, and mailing the form back to me in the provided self addressed stamped envelope it would be very much appreciated.

Yes, You have my permission to use my survey in part or in whole.

No, You may not use my survey in your research.




Signature

8/24/09

Date

Additional Comments _____

A sincere thank you for your response,


Bruce Rogers, Ed.D. Candidate

Advisor- Cordelia Zinskie, Ed.D.
Chair- Dept. of Curriculum, Foundations, and Reading
Georgia Southern University
P. O. Box 8144
Statesboro, GA 30460
Phone: (912) 478-0672

Appendix E
GASP Use of Membership Approval



From: Dr. Leslie W. Munson, GASP External Relations &
Communications Program Manager
Cc: Dr. Larry Hilgert, Research Chair
Dr. Deborah Crockett, President
Dr. Catherine Cadenhead, President Elect

Date: January 26, 2010

To: Bruce Rogers
1703 Berkshire Lane
Statesboro, GA 30461
Home (912) 587-5566

Dear Mr. Rogers,

This letter is to inform you that the GASP Executive Board has met for our Fall Board meeting and considered your request to survey the GASP membership at large. After some discussion, it with pleasure to inform you that the Executive Board has voted unanimously to allow you to have access to the contact information to reach the membership for research/ dissertation study purposes.

It is also agreed that this research will maintain confidentiality of individual members and in no way release personal information of individual members to anyone outside of your dissertation committee or those involved with your dissertation pursuits.

We wish you good luck in your research and your professional development!

Sincerely,

Leslie W. Munson

Leslie W. Munson, PhD
GASP Program Manager-External Relations & Communications
2009-2010

Appendix F
IRB Research Approval Letter

Georgia Southern University Office of Research Services & Sponsored Programs		
Institutional Review Board (IRB)		
Phone: 912-478-0843		Veazey Hall 2021
		P.O. Box 8005
Fax: 912-478-0719	IRB@GeorgiaSouthern.edu	Statesboro, GA 30460

To: Bruce A. Rogers
1703 Berkshire Lane
Statesboro, GA 30461

CC: Charles E. Patterson
Vice President for Research and Dean of the Graduate College

From: Office of Research Services and Sponsored Programs
Administrative Support Office for Research Oversight Committees
(IACUC/IBC/IRB)

Date: May 5, 2010

Subject: Status of Application for Approval to Utilize Human Subjects in Research

After a review of your proposed research project numbered H10345 and titled "**Examining Aspects of Role Change for School Psychologists in Georgia: A Mixed Methods Analysis,**" it appears that (1) the research subjects are at minimal risk, (2) appropriate safeguards are planned, and (3) the research activities involve only procedures which are allowable. You are authorized to enroll up to 601 subjects.

Therefore, as authorized in the Federal Policy for the Protection of Human Subjects, I am pleased to notify you that the Institutional Review Board has approved your proposed research.

This IRB approval is in effect for one year from the date of this letter. If at the end of that time, there have been no changes to the research protocol; you may request an extension of the approval period for an additional year. In the interim, please provide the IRB with any information concerning any significant adverse event, **whether or not it is believed to be related to the study**, within five working days of the event. In addition, if a change or modification of the approved methodology becomes necessary, you must notify the IRB Coordinator **prior** to initiating any such changes or modifications. At that time, an amended application for IRB approval may be submitted. Upon completion of your data collection, you are required to complete a *Research Study Termination* form to notify the IRB Coordinator, so your file may be closed.

Sincerely,



Eleanor Haynes
Compliance Officer

Appendix G
Letter of Informed Consent

Bruce Rogers
1703 Berkshire Lane
Statesboro, GA 30461
(912) 697-2056
bruce@gaspnet.org

May 5, 2010

Dear Colleague,

The field of school psychology comes with many professional challenges. Recently some of those challenges have included changes to IDEA, identification of specific learning disabilities, and also, the Pyramid of Interventions. I am conducting statewide dissertation research entitled, "Examining Aspects of Role Change for School Psychologists in Georgia: A Mixed Methods Analysis", which will examine changes in our roles as school psychologists in Georgia. I ask for your help in this.

This study is important in determining what shifts in our roles have occurred as a result of all of the recent legislative and procedural changes. Understanding what roles we are serving in the schools and our attitudes towards change will contribute to the effectiveness of our profession in service to children and steps we need to take for the future.

I ask that you to please participate in this brief 10-15 minute web survey. Completion of the online survey implies that you agree to participate and your data may be used in this research. The survey is voluntary and you may decline without penalty at any time. The research is not expected to cause any discomfort or stress with minimal expected risks. Your survey results can be anonymous.

However, for practicing school psychologists in the field 10 years or more, you have an opportunity to help further by volunteering for an interview examining feelings and perspectives towards the recent changes in our profession. If you wish to volunteer for an interview please complete the personal contact information (at the end of the survey). Please note that steps to maintain confidentiality are taken but not be guaranteed because of the technology of the internet.

If you have any questions regarding this survey or wish results from this research you may contact me by phone at 912-687-2056 or email at bruce@gaspnet.org. Please contact the Office of Research Services and Sponsored Programs for answers to questions about your rights as research participant by email IRB@georgiasouthern.edu or phone (912) 478-0843. My advisor is also available for any questions or concerns; Dr. Cordelia Zinskie, Chair- Dept. of Curriculum, Foundations, and Reading, Georgia Southern University, (912) 478-0672.

Enclosed is the survey web link <http://www.surveymonkey.com/s/YWPNP7J>.

A sincere thank you for your participation and for your valuable contribution in this research!

Kind Regards,

Bruce Rogers, NCSP
School Psychologist

Appendix H
Interview Consent Statement

Bruce Rogers
1703 Berkshire Lane
Statesboro, GA 30461
(912) 697-2056
bruce@gaspnet.org

Interview Informed Consent Statement

I am conducting statewide dissertation research entitled, “Examining Aspects of Role Change for School Psychologists in Georgia: A Mixed Methods Analysis”, which will examine changes in our roles as school psychologists in Georgia. The contents of this project will be analyzed in my research through Georgia Southern University.

The research is not expected to cause any discomfort or stress and minimal risks are expected for participating. However, if you feel uncomfortable during the interview, you may decline further participation at any time without penalty. Your participation is voluntary. This interview will last approximately 20 to 30 minutes.

All information on your identity will be kept confidential and the interview will be stored digitally on my computer for later analysis. Individuals who will have access to the interviews will be myself, my advisor and a data analysis consultant (if needed). If information about this interview is published, it will include non-real names.

By signing below you consent to continue with this interview.

Name _____ Region _____ Yrs Exp _____

If you have any questions regarding this survey or wish results from this research you may contact me by phone at 912-687-2056 or email at bruce@gaspnet.org. Please contact the Office of Research Services and Sponsored Programs for answers to questions about your rights as research participant by email IRB@georgiasouthern.edu or phone (912) 478-0843. My advisor is also available for any concerns. Dr. Cordelia Zinskie, Chair- Dept. of Curriculum, Foundations, and Reading, Georgia Southern University, (912) 478-0672.

I, the undersigned, verify that the above informed consent procedure has been followed.

Investigator Signature

Date