

2-25-2005

School-Based Mental Health Services Delivered By School Psychologists

Emily Luis

University of South Florida

Follow this and additional works at: <https://scholarcommons.usf.edu/etd>

 Part of the [American Studies Commons](#)

Scholar Commons Citation

Luis, Emily, "School-Based Mental Health Services Delivered By School Psychologists" (2005). *Graduate Theses and Dissertations*.
<https://scholarcommons.usf.edu/etd/751>

This Ed. Specialist is brought to you for free and open access by the Graduate School at Scholar Commons. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact scholarcommons@usf.edu.

School-Based Mental Health Services Delivered
By School Psychologists

by

Emily Luis, M.A.

A thesis submitted in partial fulfillment
of the requirements for the degree of
Education Specialist
Department of Psychological and Social Foundations
College of Education
University of South Florida

Major Professor: Michael J. Curtis, Ph.D.
Kelly Powell-Smith, Ph.D.
Jeffery Kromrey, Ph.D.

Date of Approval:
February 25, 2005

Keywords: psychology, education, students, needs, at-risk

© Copyright 2005 , Emily Luis

Table of Contents

List of Tables	iii
Abstract	iv
Chapter I Introduction	1
Research Questions	6
Significance of Study	6
Definitions of Terms	7
Delimitations	8
Limitations	8
Chapter II Review of Related Literature	10
Lack of Mental Health Services	11
History and Definition of Child Mental Health Services	14
Definition of Mental Health	16
Models of Effective Mental Health Services	18
School-Based Service Model	20
School-Linked Service Model	22
Community-Based Service Model	23
School Psychologist Role in Mental Health Services	25
Training	25
Desirability	28
Functions within the School	29
Summary	32
Chapter III Method	33
Creation of Database	33
Participants	34
Ethical Considerations	35
Instrumentation	35
Procedure	37
Current Study	38
Analysis	38
Chapter IV Results	40
Demographic Information	41

Research Question #1	45
Research Question #2	48
Research Question #3	50
Research Question #4	52
Research Question #5	53
Research Question #6	54
Chapter V Discussion	56
Summary of Results	56
Limitations of Study	63
Recommendations for Future Research	64
Conclusions	65
References	67
Appendices	74
Appendix A: Mental Health Survey	75
Appendix B: Consent Letter	81

List of Tables

Table 1	Demographics Characteristics in Database	43
Table 2	Annual Salary	44
Table 3	Years of Experience	45
Table 4	Employment Setting	45
Table 5	Mental Health Services Provided by School Psychologists	47
Table 6A	Response of “Yes” Open-Ended Question	48
Table 6B	Responses of “No” Open-Ended Question	49
Table 7A	Administration Support	51
Table 7B	Staff Support	51
Table 7C	Department Support	52
Table 8	Service Settings	53
Table 9	Factors that Contribute to Success	54
Table 10	Training Needed in Mental Health Services	55

School-Based Mental Health Services Delivered by School Psychologists

Emily Luis

ABSTRACT

This study involved analyses of an existing database conducted for the purposes of identifying and understanding factors that are associated with the delivery of school-based mental health services by school psychologists. The study examined the average number of hours per week in which school psychologists engage in mental health services and the types of mental health services in which they engage. Factors such as training, desire to deliver mental health services, time available and support for mental health services were investigated. The database that served as the basis for these analyses had been created by mailing a survey to 1000 randomly selected practicing school psychologists who were Regular Members of the National Association of School Psychologists. The survey asked for responses to questions relating to a range of issues about the delivery of school-based mental health services. Four hundred and sixty-three participants responded for a response rate of 47.4%. The analyses indicated that consultation relating to academic, as well as behavioral problems and counseling, were identified by school psychologists as the mental health services they engage in most frequently. In addition, approximately three out of four school psychologists

participating in this study reported that they wanted to be more involved in the delivery of school-based mental health services. Training and support for mental health services were also identified by school psychologists as major factors in their ability to deliver such services to students and families. The implications of the findings are discussed.

Chapter I

Introduction

Poverty, violence, drug abuse, bullying, and theft are among the many issues that children face in today's society. Presently, many of these problems are encountered in schools; however, most of the resources allocated to schools are directed to the instructional needs of children (Adelman & Taylor, 1998). Mental health issues are not considered to be of top priority in many school settings (Adelman & Taylor, 1998). The irony of this orientation is the fact that educators expect children to succeed academically when they do not possess mental or physical well-being. Furthermore, the mental health needs of children are actually escalating (Adelman & Taylor, 1998), calling for increased mental health services to children and families by school psychologists and other health professionals.

From a demographic perspective, most of the children born this year will be more at-risk for social, emotional, and academic problems than ever before (Adelman & Taylor, 1998). According to the Children's Defense Fund (2000), an American child is reported abused or neglected every 11 seconds; 581,000 children are in foster care with a waiting list of 127,000. Close to 12 million children are poor, millions are hungry and/or at risk for hunger, living in the worst housing conditions, or are homeless. Almost 80% of poor children live in working households. According to the National Center for Children in Poverty (2001), 37% of children in the United States (27 million) are members of low income families; 40% of children under the age of 6 live in homes where the income is

below \$27,000 for a family of four; and 16% of children (over 11 million) live in homes that are below the federal poverty level (\$12, 861 for a family of three).

According to the Centers for Disease Control and Prevention (2000), homicide is the second leading cause of death for all 15-24 year olds, with most killed with guns. Homicide is the leading cause of death for African-American youth, and more than 4,000 youth ages 10-19 years were injured as a result of violence in 2000. In addition, one-half of motor vehicle accidents involving adolescents are associated with alcohol and other drugs. Thirty percent of adolescent suicides are associated with drugs or alcohol and it has been demonstrated through research that the younger the age of initial alcohol abuse, the greater the possibility of substance abuse during adolescence and adulthood.

According to the National School Safety Center (2001), one of every seven children reports being bullied in school, and in an average classroom of 20 children, there are likely to be three children who are either victims of bullies or bullies themselves.

According to Child Trends (2001), sexually transmitted diseases are increasing in the 15 to 19 year age group.

Finally, according to the Substance Abuse and Mental Health Services Administration (2000), 12% of high school aged students complete suicide. In addition, for young people 15-24 years old, suicide is the third leading cause of death; however, only 36% of youth at risk for suicide during the past year received mental health services. According to the Surgeon General's report, National Strategy for Suicide Prevention: Goals and Objectives for Action (2000), there are serious concerns about the appropriate diagnosis and treatment of emotional and behavioral difficulties in children. These

staggering statistics provide clear evidence of the need for mental health related programs and services in schools.

Mental health issues encompass those characteristics that relate to mental well-being. The most common mental health issues that adversely affect children's academic performance include: internalizing problems (i.e., depression and anxiety), externalizing problems (i.e., conduct disorder, oppositional defiant disorder, and attention deficit hyperactivity disorder), family issues (i.e., domestic violence, child abuse, divorce), substance abuse, anger, poor social skills, and stress (Florida Department of Education, 2000; Kestenbaum, 2000). However, can school mental health programs help students to a significant degree, given the challenges so many children face? Schools provide mental health programs because legal mandates require certain mental health services for students diagnosed with special education needs and because school policy makers and practitioners recognize that social, emotional, and physical health problems and other barriers to learning must be addressed if schools are to function effectively and students are to learn and perform successfully (Adelman & Taylor, 1998).

Given these challenges, school mental health programs could become one of the most efficient means for preventing major health and social problems that confront American children. By preventing health problems that afflict young people and threaten their adulthood, school mental health programs could help reduce the growing costs of health care, improve educational outcomes and, therefore, improve economic productivity and the quality of life (Kolbe, Collins, & Cortese, 1997). Based on this great need, the Surgeon General's Report (2000) and the President's New Freedom Commission on Mental Health (2000) have called for the nation to revamp, regenerate,

and create school mental health programs. Proposals to reform health, education, and social services also have included ways to improve existing school mental health programs (Kolbe, et. al, 1997).

One central issue relating to expanded and improved mental health services for children is the need for providers, specifically school psychologists, to move away from the traditional test and place model of service delivery (Curtis, Hunley, Walker, & Baker, 1999). School psychologists would have a much more positive impact upon children if they increased emphasis on intervention-based services, including services that address the mental health needs of children in their everyday lives. School psychologists need to focus on helping children in “making sound, responsible decisions, responding to stress and crisis in developmentally appropriate ways, resolving conflicts in a non-violent manner, demonstrating positive self-esteem, and participating in activities that promote physical/mental health and well-being” (Florida Department of Education, 2000, p. 1).

Research has examined the services school psychologists provide to schools (Cheramine & Sutter, 1993; Curtis, et al., 1999; Curtis, Hunley, Grier, 2004; Nastasi, Varjas, Bernstein & Pluymert, 1998; Reschly, 2000). However, despite the extensive knowledge base regarding what services school psychologists provide in general, few studies have focused directly on mental health services. Consequently, the general purpose of the present study was to explore directly the mental health services that school psychologists provide in schools.

This study explored the current role that school psychologists play in providing mental health services in schools and factors that were associated with those services. Prior research suggests that school psychologists spend only approximately 11% of their

time delivering services other than special education related activities (Curtis, et al., 1999). This present study specifically examined how much time school psychologists spend delivering mental health services and the specific types of mental health services delivered.

An additional purpose of this study was to examine factors that relate to the delivery of mental health services by school psychologists. Factors such as years of training, desirability (if the school psychologist would like to provide mental health services and why), present employment setting, support for mental health services (by administration, staff, and psychological services department), and student to school psychologist ratio were examined.

Finally, many studies of the professional practices of school psychologists have employed a survey methodology (Curtis, et al., 2004; Hartshorne & Johnson, 1985; Huebner & Mills, 1994; McDaid & Reifman, 1997; Reschly & Wilson, 1995; Roberts & Rust, 1994). Although some studies resulted in return rates in the range of 70% to 80% (e.g. Curtis, Grier, et al., 2002; Curtis, et al., 1999; Graden & Curtis, 1991; Reschly & Wilson, 1995;) others have reported return rates of only 40 to 45% (e.g., Farling & Hoedt, 1971; Smith, 1984; Smith, Clifford, Hesley, & Leifgren, 1992). Some studies have included a national sample of school psychologists (e.g. Reschly & Wilson, 1995) to examine school psychologist demographics, roles, role preferences, and views on system reform. Other studies have used smaller samples (less than 100 participants) of school psychologists to survey their demographics, roles, and job satisfaction (Hartshorne & Johnson, 1985; Huebner & Mills, 1994; McDaid & Reifman, 1997; Roberts & Rust, 1994). In the present study, survey methodology also was used. However, specific

techniques used by other researchers (Curtis et al., 1999) were incorporated to achieve a desirable response rate. The purpose of using survey methodology was that it has been demonstrated to yield higher participant response rates than having participants maintain weekly logs of their school based mental health related activities (Lazega, Batsche, & Curtis, 2003).

Research Questions

To generate information regarding the delivery of school-based mental health services by school psychologists, the following research questions were addressed by analyzing a database created through a national survey of school psychologists.

1. In what types of mental health services do school psychologists engage?
2. Do school psychologists want to be more involved in providing mental health services? Why or why not?
3. To what extent do school psychologists who provide mental health services report that they are supported by administration, by department, and by staff?
4. In what types of service settings do school psychologists primarily work with students and families with mental health problems?
5. What are the factors that school psychologists report contribute to their success in the delivery of mental health services?
6. In what areas of mental health service delivery do school psychologists report that they need more training?

Significance of Study

It is anticipated that findings from this study will make a significant contribution to the field of school psychology and to mental health services for students in several

ways. First, this study can offer school psychology training programs information about what mental health services school psychologists are actually providing and what services school psychologists would like to be providing in schools. Second, this study can offer information to national and state professional associations about mental health issues that need to be addressed with regard to training, research, and professional practice. Finally, this study can inform policy changes that support an increase of mental health service delivery to students in school settings.

Definition of Terms

Mental health issues encompass those characteristics and factors that relate to mental well-being. The lack of mental well-being is characterized by an inability to adapt to one's environment and regulate behavior (Webster's, 2002). Mental health issues that adversely affect children's academic performance include: internalizing problems (i.e., depression and anxiety), externalizing problems (i.e., conduct disorder, oppositional defiant disorder, and attention deficit hyperactivity disorder), family issues (i.e., domestic violence, child abuse, divorce), substance abuse, anger, poor social skills, and stress (Florida Department of Education, 2000; Kestsenbaum, 2000).

Services that are considered to be Mental Health Related:

Individual therapy/counseling	Crisis intervention
Family therapy/counseling	Prescribing medication/Medication management
Group therapy/counseling	Designing/administering individual service plans
Substance abuse counseling	Program development and administration
Early intervention services	Personnel training
Family/Child advocacy	Research and evaluation
Behavior management consultation	
Assessment and diagnosis	

Delimitations of Study

A delimitation of this study was that only school psychologists who were Regular members of the National Association of School Psychologists (NASP) were participants in the research that led to the development of the national database used to address the research questions. This excluded all other school psychologists who are not affiliated with NASP. Nevertheless, Fagan & Wise (2000) report that membership in NASP is very likely the best representation of the field of school psychology.

Limitations of Study

A potential threat to internal validity was related to the methodology used to create the database. The survey instrument asked school psychologists to recall the mental health services that they had provided over the past week. Potentially, there was the problem of recall bias (Schweigert, 1994). School psychologists may not have recalled the correct number or type of services that they provided. They had to reflect back on prior experiences and this may have resulted in inaccurate information being provided.

An additional threat to internal validity was that participants may have been inclined to provide socially desirable responses. By providing this survey, researchers were under the assumption that school psychologists do provide some mental health services. If a school psychologist did not provide such services at all, he/she may have been more inclined to respond falsely. Because the participants would have known the purpose of the study, they may have overestimated the types and amounts of mental health service they delivered (Schweigert, 1994).

A potential threat to external validity relates to population validity. The survey used to create the database was mailed to 1,000 NASP Regular members. While using a national association membership list database as the basis for sampling does not represent random selection of all school psychologists, this procedure was used to increase the likelihood of geographical representation nationwide (Curtis, et al., 1999).

Chapter II

Review of the Related Literature

Much research has been published regarding mental health services that are delivered through schools. The literature has included studies on the need for mental health services (Adelman & Taylor 1998; Kolbe, Collins, & Cortese, 1997; Pumariega & Vance, 1999), the lack of services to children in need (Carlson, Paavola & Talley, 1995; Flaherty, Weist & Warner, 1996; Knoff, Curtis, & Batsche, 1997; Nastasi, 1998), history and definition of effective mental health services (Concept paper, 2002; Dryfoos, 1995; Weist & Christodulu, 1995), models of effective mental health services (Carlson, Paavola & Talley, 1995; Dryfoos, 1995; Dryfoos, 1998; Nabors, Weist, Tashman, & Myers, 1999; Nastasi, 1998; Nastasi, 2000; Porter, Epp, & Bryant, 2000; Pumariega & Vance, 1999) and the school psychologist's roles in mental health service delivery (Cheramine & Sutter, 1993; Nastasi, Bernstein, Varjas & Pluymert 1998; Nastasi, 2000; Roberts & Rust 1994; Short & Rosenthal, 1995; Tharinger, 1995).

This literature review will communicate the broadly defined area of mental health services for students of all ages. Discussion of the literature is organized into the following sections based on topics examined (a) the lack of mental health services for children in need, (b) definition of effective mental health services, (c) models for effective mental health service delivery, and (d) school psychologists' roles in the delivery of mental health services.

The Lack of Mental Health Services

Child and adolescent mental illness and emotional disturbance were once thought to be relatively rare. Recent studies, however, suggest overall prevalence rates of 15% to 19%, with 3% to 8% for serious illness and emotional disturbance. Morbidities associated with disturbances such as suicide, homicide, substance abuse, child abuse, teenage pregnancy, school drop out, and youth crime, are increasing at an alarming rate (Pumarieg & Vance, 1999).

Though reports have suggested the need for greatly expanded mental health services in America, a lack of programs to efficiently meet the needs of students still exists. The Office of Technology Assessment (OTA), stated that the most conservative estimate is that 7.5 million out of 63 million children are in need of mental health services; half of these, about 3 million, are thought to present serious disturbances. However, in estimating that only two million children a year receive mental health treatment, OTA reported; “The majority of children with mental problems fail to receive appropriate treatment. Many of the six to eight million children in our nation who are in need of mental health interventions receive no care; other children, perhaps 50 percent of those in need of treatment, receive care that is inappropriate for their situation” (Flaherty, Weist, & Warner, 1996, p.342). Additionally, OTA reported that same year that 12% to 15% of adolescents present emotional or behavioral problems that warrant intervention; however, less than one-third of these adolescents received mental health services (Flaherty, et al., 1996).

The lack of services negatively impacts students’ school readiness through factors such as physical well-being, motor development, social and emotional development,

openness to learning, language use, and cognitive functioning and general knowledge. Consequently, substantial work is needed if students are to succeed in school and community settings. School readiness issues have been identified by the National Education Goals Panel (1994) as necessary targets in the schools to make for healthy students. However, these needs are not being met and students are not succeeding. In 1996, a national report evaluating the impact of the Title I program (government program funded through the Elementary and Secondary Education Act for low socioeconomic schools), conducted by the U.S. Department of Education indicated that students in high poverty schools actually lost ground academically relative to students in other schools between 1984 and 1992. According to the report, state data indicated that, by grade 4, there was already a large gap between students in high poverty schools and those in low-poverty schools (U.S. Department of Education, 1996). These students are at-risk for academic difficulties and potentially for dropping out of school (Knoff, Curtis & Batsche, 1999). By identifying high risk students who would benefit from intervention, mental health services could have a strong impact on this problem. Mental health services would be part of an intervention plan to help students achieve academic gains, therefore, decreasing the potential for dropping out of school.

The ability of schools, as currently structured and financed, to meet the physical and mental health needs of children has been severely challenged. The ratio of students to school psychologists has been a matter of concern to the field of school psychology with regard to its effect upon the quality of services delivered by school psychologists. For example, Smith (1984) reported that ratios of 1,500:1 or less were associated with more intervention-based services and less assessment services. The student ratios for other

school personnel such as social workers are reported to be 2,500 to 1, school counselors 1,000 to 1, and school nurses 1,000 to 1. Student ratios such as these would make it very difficult to provide adequate services for children (Carlson, Pavlov, & Tally, 1995). The inadequacy of mental health services to children is not only reflected in these student ratios, but also in funding, support, and identification of students in need of such services (Carlson, et al., 1995).

Students suffering from emotional and behavioral disorders should receive services in schools under the requirements of the Individuals with Disabilities Education Act (Carlson, et al., 1995). However, close examination of the programs and policies related to IDEA (reauthorization of this act was signed into law as the Individuals with Disabilities Education Improvement Act in December, 2004) reveals that less than 1% of children are identified as behaviorally or emotionally disturbed, despite estimates that 15% are really in need of services (Carlson, et al., 1995). Over half of all schools do not provide necessary services to these children, but rather rely on the community (Carlson, et al., 1995). However, because only 3% of school-aged children receive mental health services from community providers, there could be a discrepancy of 12% of children needing and receiving services (Carlson et al., 1995). Less than 1% of children in the United States receive mental health treatment in residential settings and another 5% in outpatient or community based settings, with the majority of children in need receiving insufficient or no mental health services whatsoever (Pumariega & Vance, 1999).

In summary, the need for mental health services for children and youth is well documented (Carlson, et al., 1995; Pumariega & Vance, 1999; Nastasi, 1998). Mental health concerns range from risks in the general population, such as substance abuse, to

severe mental disorders, such as schizophrenia, that are found in a very small fraction of the population (Nastasi, 1998). The estimates of mental health needs demand a comprehensive approach to the delivery of mental health services (Nastasi, 1998). Therefore, approaches to intervention and assessment must be broad in focus and address the multiple contexts in which children live, including the family, school, and community (Nastasi, 1998). In addition, physical and mental health services should be closely linked to both psychiatric disorders, such as depression, and social morbidities, like substance abuse (Nastasi, 1998). “For this goal to be attained effectively, collaboration among professionals in both the social and medical sciences is required. The final step is to develop and implement an effective mental health program that has interventions that are valid and are subject to systematic evaluation and research” (Nastasi, 1998, p. 167). However, for these goals to be accomplished, a fundamental understanding is needed of what exactly mental health services entail.

History and Definition of Child Mental Health Services

The United States followed the lead of Western European nations in the development of children’s services during the latter half of the 19th Century and the beginning of the 20th Century (Pumariega & Vance, 1999). Throughout America’s history, rapid cultural changes have occurred due to immigration, industrialization, and urbanization. Policy makers recognize that ineffective structures, which served previous societies, are no longer adequate to prepare the population for the more complex needs of new generations (Pumariega & Vance, 1999). Requirements for compulsory education led the way starting in the 1860s and were followed by the establishment of child abuse laws in the 1880s. In the 1890s came the establishment of the juvenile courts (Pumariega

& Vance, 1999). Child mental health services were initiated in the United States in response to the perceived need for counseling school children and juvenile offenders, rather than incarcerating them with adult offenders (Pumariega & Vance, 1999). The first mental health clinic for children was founded at the University of Pennsylvania in 1896, with a focus on school problems (Pumariega & Vance, 1999). Juvenile court clinics in Chicago and Boston were founded in the early 1900s, giving rise to the first interdisciplinary child mental health services in the nation. Physicians, social workers, and psychologists staffed these clinics (Pumariega & Vance, 1999).

Movement toward the medicalization of psychiatry in the 1970s and 1980s served to direct the delivery of child and adolescent psychiatric services through a more hospital-based model (Pumariega & Vance, 1999). As a result of this development, child guidance clinics and community mental health centers had little significant psychiatric input. As a result, community-based children's services were neglected (Pumariega & Vance, 1999). Today, The IDEA placed a large responsibility upon school districts to finance and deliver services needed to address health and mental health needs that can impair the education of children (Pumariega & Vance, 1999). However, in the 1990s, the focus returned to bringing outside health and social service programs into schools in response to contemporary crises resulting from poverty, immigration, and community decay (Dryfoos, 1995). In the mid-1990s, every major national social and health organization supported the concept that community agencies should bring services into schools (Dryfoos, 1995).

Definition of Mental Health

In bringing outside health and social service programs into schools, it is important that legislators, school personnel, and parents have a firm understanding as to what these services entail. But first, they need to have a clear definition of mental health. The Surgeon General (2002) defined mental health as:

The successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and cope with adversity; from early childhood until late life. Mental health is the springboard of thinking and communication skills, learning, emotional growth, resilience, and self-esteem (p.1)

Based on this definition, effective mental health services should be provided through school systems, medical systems, and human service systems in an integrated fashion. By pulling and integrating the resources from each system, mental health facilities in schools could serve as a very effective source of intervention (Surgeon General, 2002). The focus of mental health services should be on the prevention, treatment, and support services needed to make sure children and families enjoy quality mental health as defined above. The delivery of a mental health service system should reflect a collaborative effort between state, local, and private entities (Surgeon General, 2002). It should not be the sole responsibility of the school to provide mental health services; instead, all professionals who can bring resources to the school should be utilized (Surgeon General, 2002).

Besides the Surgeon General (2002), other policy leaders view mental health services in schools in alternative ways. For example, The Policy Leaders Cadre for

Mental Health in Schools (2001) points out that discussions of mental health usually focus on “mental illness, disorders, or problems” (p.27). Moreover, there is a strong tendency to define emotional and behavioral problems as “disorders” reflecting a deficit-based paradigm. However, arguing that mental illness should not be viewed solely as a disorder, the Surgeon General’s Conference on Children’s Mental Health (2000) stated,

Both the promotion of mental health in children and the treatment of mental disorders should be major public health goals. The term mental health in schools should encompass considerations of the school’s role related to both positive mental health, including social and emotional development, and mental health problems including, psychosocial concerns and mental disorders of students, their families, and school staff.
(Policy Leadership Cadre for Mental Health in Schools, 2001, p.5-6)

This definition argues that mental health services provided in the schools need to be offered in broader terms. Mental health services should address both the psychological side of problems, such as social and emotional development, and as well as the physical health concerns of students.

There is now a national movement to bring comprehensive mental health services to youth through the schools. This movement began in the mid-1980s and developed even more rapidly in the 1990s (Weist & Christodulu, 2000). From this movement, some legislators have gone even farther in their efforts to provide mental health services (Weist, & Christodulu, 2000). Expanded School Mental Health (ESMH) programs augment traditional school mental health services offered by school counselors, school

psychologists, and social workers by linking schools to community mental health centers, health centers, health departments, and other social services (Weist, & Christodulu, 2000). In this way, ESMH programs provide an array of mental health services to youth in both special and regular education including assessment, case management, treatment, and prevention programs (Weist & Christodulu, 2000).

Models of Effective Mental Health Services

In the past decade, professionals from various backgrounds such as education, psychology, medicine, and public health have recognized the need for integrated service delivery to address the health, mental health, educational, and social service needs of youth (Nastasi, 2000). Over the past 30 years, many models for school or community-based comprehensive health and mental health care for children, adolescents, and their families have been proposed (Nastasi, 2000). Nastasi (2000) has identified several key components common among these models.

1. Integration of educational, health or mental health, and social services within and across agencies and professional disciplines;
2. Attention to the various ecological contexts that influence children and adolescents, including school, family, peer group, and community;
3. Services that are individually, developmentally, and culturally appropriate;
4. A continuum of services ranging from prevention to treatment;
5. Systematic evaluation of program process and outcome; and

6. Provision of care based upon empirical evidence of the complexity of factors that influence the well being of children and adolescents and their families (p. 541).

Nastasi (2000) argues that each of these six elements is essential for the establishment of an effective mental health service delivery system within the context of a school setting.

Nastasi (2000) reviewed the characteristics of the numerous types of school-based service delivery models that exist. Many encompass the characteristics and goals that make for an effective school-based mental health service delivery system as identified above. Some of the more widely used models are based upon the premises of prevention and consultation. Prevention models incorporate the rationale of addressing problems before students require in-depth treatment. Teachers refer students who they believe are at risk for some type of mental or physical problem. Teachers also make parents aware that there are mental health service providers who are accessible to them. The team of mental health service providers then evaluates the student or family and provides interventions to stop the problem before it develops further.

One of the most widely used school-based interventions in the mental health care service model is consultation. Therapists, usually from outpatient mental health clinics or universities, meet with teachers to discuss children's behavioral and academic performance and to plan appropriate interventions (Porter, Epp, & Bryant, 2000). Teachers are often given information about various learning and emotional disorders during those discussions (Porter, et al., 2000).

Three other models for providing mental health services in schools have also been identified (Dryfoos, 1995; Porter, et al., 2000; Flattery et al., 1996; Carlson, et al., 1995).

They are referred to as school-based, school-linked, and community-based models.

School-based services are those located and delivered directly in school buildings, such as those offered through a school-based health clinic. School-linked services are those provided from outside, but near the schools, with an administrative structure linking the school system to provider agencies such as local businesses. Finally, community-based services are those administered by community agencies and serve as resources for school personnel such as the school psychologist, counselor, or social worker (Dryfoos, 1995).

School-Based Service Model The school-based service model, as proposed by Dryfoos (1995), is delivered in a form called the school-based health clinic. For more than 25 years, school-based health clinics have provided physical health services; however, most clinics include some level of mental health services as well (Porter, et al., 2000). The purpose of school-based health clinics is to provide integrated health care through treatment plans developed by a multidisciplinary team. The addition of the mental health service component has proven to be very successful in these clinics (Porter, et al., 2000).

School-based mental health clinics are located in numerous cities, often in poor and minority communities. Programs ranging from violence prevention to bereavement counseling are examples of the services provided. Many of the directors of these centers believe that “collaboration with other school staff is critical in the development of effective, well-coordinated programs,” (Porter, et al., 2000, p. 318). Mental health services offered through school-based clinics occur in the context of a range of other on-site health services including medical screening and physical examinations, treatment for accidents and minor illnesses, and counseling for family planning and personal problems

(Flattery, et al., 1996). The staff in these school-based clinics typically include a medical assistant or receptionist, nurse practitioner or physician and a master's level mental health clinician, usually a social worker who addresses the mental health needs of students (Flattery, et al., 1996).

The Baltimore City School District offers one example of the use of the school-based clinic model. There are currently eight school-based clinics located in four middle schools, three high schools, and a middle/high school for expectant mothers (Flattery, et al., 1996). These clinics serve as the primary source of mental health care for many of the students, and even provide supportive medical services for problems such as diabetes and seizure disorders (Flattery et al., 1996).

Another example of this type of service is the Johns Hopkins School-Based Program, which is part of the Johns Hopkins Community Psychiatry Department (Porter, et al., 2000). This program includes school-based mental health clinicians-professional counselors, psychologists, art therapists, and social workers working in 19 schools in east Baltimore on a full-time basis (Porter, et al., 2000). In addition to these personnel, each school is provided with two hours of consultation each week by has a psychiatrist from the Community Psychiatry Department (Porter, et al., 2000). In this 2-hour period, psychiatric evaluations are completed and, if needed, medication is prescribed and monitored. The mental health clinicians provide individual, group, and family counseling and make referrals to other departmental units for services such as in-home visits as well as to other community agencies (Porter, et al., 2000). A great advantage of this model is that the services are provided during the school day, after school, and even during the summer (Porter, et al., 2000).

Another example of the school-based mental health clinic model is the Memphis City Schools (Carlson, et al., 1995). The mental health clinic involves psychologists in providing services such as coordination, consultation, and the formulation of treatment programs (Carlson, et al., 1995). It includes an outpatient treatment program for children and families, provides prevention programs, consultation for principals and teachers, formal interagency coordination/collaboration, and psychology internships (Carlson, et al., 1995). Annually, services typically include over 8,000 hours of therapy, 7,000 hours of consultation, and over 5,000 psychoeducational evaluations (Carlson, et al., 1995).

School-Linked Service Model. The second type of model identified by Dryfoos (1995) is the school-linked model. An example of this model is the Healthy Start Program in California. In 1991, the California legislature passed the Healthy Start Support Services for Children Act to establish innovative, comprehensive, school-based or school-linked health, social, and academic support services throughout the state (Carlson, et al., 1995). Support services include health care, mental health services, substance abuse prevention and treatment, family support and parenting education, academic support services, counseling, nutritional information, and youth development (Carlson, et al., 1995). By utilizing this program, more students and families receive mental health services through the schools (Carlson, et al., 1995).

Another example of the school-linked support service model is the School of the Future that was undertaken and funded by the Hogg Foundation for Mental Health in 1992 (Carlson, et al., 1995). This program demonstrates school-based and school-linked models of health and mental health services delivery that are designed to positively impact the quality of education and community life for children and families (Carlson, et

al., 1995). Key features of the School of the Future include “the integration of health and human services in the public school, the involvement of both parents and teachers in program activities, involvement of many organizations, both public and private, a strong commitment to the project by superintendents, principals and other school staff, and a willingness to participate in the evaluation of the project,” (Carlson, et al., 1995, p. 194). With the integration of community and school system resources, the School of the Future is intended to have a positive impact on students in the realm of academic performance, physical health, and mental health (Carlson, et al., 1995).

Community-Based Service Model. The final model identified by Dryfoos (1995), is the community-based model. This model emphasizes a partnership between school and business leaders intended to deliver an effective mental health program that is supplied through the schools. Several of these programs exist throughout the United States (Dryfoos, 1998). One example of this model is the Roots and Wings Program, a comprehensive elementary school intervention project that starts at age four in preschool and heavily emphasizes one-on-one service through individual plans (Dryfoos, 1998). This program utilizes family support teams and works closely with classroom teachers through direct consultation (Dryfoos, 1998). This program was developed by The Center for Research on Effective Schooling for Disadvantaged Students at Johns Hopkins University (Dryfoos, 1998). The Roots and Wings Program represents a collaborative effort between the school and the community and is designed make students more academically, mentally, and physically healthy (Dryfoos, 1998).

In summary, these models and programs are becoming increasingly popular and could represent an effective approach for providing mental health services for students

and families. They provide for a broad range of services to youth in both special and general education. The range of services provided is comprehensive, ranging from therapies to case management and from prevention to evaluation; however, outcome data are needed. To ensure quality, positive outcomes, all programs need to develop “standards of care, emphasize wrap-around services, enhance collaboration and coordination among providers and agencies, and develop training programs for staff to qualify as a quality program” (Nabors, Weist, Tashman, & Myers, 1999, p. 485).

However, the most fundamental question is how effective are these programs in terms of client outcomes? Evaluating the quality of care provided through these programs would offer useful data for documenting treatment effectiveness that is very important in establishing accountability of health care. Initial outcome data from The Center for Mental Health Services evaluated the overall quality of services with regard to school-based mental health services systems in Vermont, New York, and California (Pumariega & Vance, 1999). Their evaluation showed that programs facilitated a reduction in hospitalization rates, a decrease in out-of-home placement, a significantly lower incidence of negative behaviors severe enough to put children at risk of out-of-home placement, and significantly lower rates of overall problem behaviors. Pumariega & Vance, (1999) believe the Center for Mental Health Services holds promise for yielding much data about the effectiveness of school-based mental health services in improving access to care for students.

The School Psychologist's Role in Mental Health Services

This final part of the literature review describes the mental health services being provided by school psychologists. Discussion is organized into the following sections: (a) Training, (b) Desirability, and (c) Functions within the school.

Many different personnel, including guidance counselors, social workers, teachers, principals, schools nurses, and community resource personnel play key roles in the design, implementation, management, and evaluation of mental health services in schools (Nastasi, Vargas, Bernstein, Pluymert, 1998). School psychologists have been of the utmost importance in the delivery of school-based mental health services. School psychologists are considered the ideal persons to take on key roles in mental health services because of their training, desirability for the job, and functions within the school (Nastasi, et al., 1998).

Training. Since 1970, most school psychologists have been trained through organized graduate level preparation programs that provide core components for practice in school-based mental health services. Although training would seem to conform most closely to school-based practices, writers in the field of school psychology have described and advocated for roles and functions of school psychologists in non-school-based, or nontraditional practice, as well. The training promoted by Short & Rosenthal (1995) includes skills in consultation, prevention, intervention, administration, health care, and finance. This training is a departure from the traditional training of school psychologists, which is most highly focused on assessment (Short & Rosenthal, 1995). If school psychologists are being trained in all of these different skills, it would be a

reasonable assumption that they could contribute significantly to the delivery of mental health services in the schools.

According to the National Association of School Psychologists' *Standards for Training and Field Placement Programs in School Psychology* (NASP, 2000), preparation in the areas of assessment, intervention, counseling, and consultation is a primary training goal. NASP training standards require that school psychologists acquire the "knowledge of behavioral, mental health, collaboration, and other consultation models and their application to particular situations. School psychologists should provide or contribute to prevention and intervention programs that promote the mental health and physical well being of students" (NASP, 2000, p. 15).

But to what extent is the preparation of school psychologists consistent with their professional responsibilities? A study conducted by Short and Rosenthal in 1995 addressed this question. They found that 63.2% of a school psychologist's time was spent in assessment, 23.6% in counseling, and 13.2% in consultation. Short also concluded that 83.3% of school psychologists in his sample (N = 273) viewed their training as valuable to their professional functioning and relatively few, 29.5%, perceived their training to have limited them in their professional practices (Short & Rosenthal, 1995). These results suggest that school psychologists spend approximately 36% of their time delivering mental health services such as counseling and consultation and that their training supported this work.

A study conducted by Curtis, Grier, Abshier, Sutton, and Hunley (2002) revealed how school psychologists are spending their time. In this study, 2,052 Regular members of NASP responded to a mailed survey, a 67.9% response rate. Over 77% of the school

psychologists responding indicated that they participate in the development of Section 504 plans. One-third of these school psychologists completed 25 or fewer initial special education evaluations during 1999-2000, demonstrating a decreasing trend in the number of special education evaluations done when contrasted with previous years. Additionally, a larger proportion (12.3%) of school psychologists reported completing 50 or more consultations during 1999-2000 than did during 1989-90. However, time invested in special education evaluations was 79.1%, with 41% of that time being spent in assessment activities, 25% in report writing, 25% in meetings, and 8% in other activities. More time was spent in conducting initial special education evaluations and reevaluations, and an even greater percentage of time spent in special education related activities overall than in all other professional functions combined. This study supports Short's finding in regard to time engaged in assessment. According to Curtis et al., 2002, the decrease in the number of special education cases between 1989-90 and 1999-2000 would lead to expectations that school psychologists would be spending more time in the delivery of professional practices not related to special education. However, the data did not support this expectation; in fact, the percentage of school psychologists who reported in engaging in no consultations, individual counseling, students groups or in-service programs actually increased over the ten-year period between studies.

Additional studies have investigated what school personnel consider to be the school psychologists' role in providing mental health services. In a study undertaken by Cheramine and Sutter (1993), a survey was given to 80 special education directors to evaluate the functions of school psychologists, the degree of effectiveness in delivering mental health services, and activities in which school psychologists should become more

or less involved. In this study, consultation appeared to be the most common function of school psychologists. The data suggested that role expansion is occurring within the field as more diverse training is provided and more diverse functions are performed. The special education directors were generally satisfied, as reported in the survey, with the mental health services provided by school psychologists, including assessment, consultation, and handling crises. However, the directors believed that school psychologists should be more involved in counseling and consultation services. This study indicates that there is a need and desire for school psychologists to be involved or to deliver mental health services to children who need them.

Desirability. Even though school psychologists have the training and are needed by teachers, students and parents in schools to provide mental health services, does this mean they want to be involved in this professional function? In another study conducted by Roberts and Rust (1994), 52 school psychologists were surveyed to investigate the difference between actual time spent and desired time spent in the areas of assessment, intervention, pre-referral interventions, and curriculum-based assessment. In the area of assessment, the mean time spent was actually 66.8%, while the mean time desired was 50.31%. In the area of intervention, 17.59% actual time was spent while 27.77% was desired. There was no difference between actual time and desired time spent in the areas of pre-referral interventions (10.15% actual time; 13.64% desired time) and curriculum-based assessment (.76% actual time; 1.27 desired time). These results indicate that school psychologists desire to be less involved in assessment and more involved in intervention activities. Mental health related services would encompass the more desired role of providing more intervention and less assessment (Roberts & Rust, 1994)

Functions Within the School. Previous research indicates that school psychologists have both the training and the desire to be involved in the delivery of mental health services in the schools. However, as noted above, mental health services currently do not represent a priority in the schools. Several authors have, therefore, envisioned different roles for psychologists. One mental health service role would involve school psychologists at the level of pre-mental health service implementation through school reform processes in order to promote mental health services as part of the school environment (Knoff & Curtis, 1996). To do this, school psychologists must “master the knowledge and skills to plan for and actually effect organizational change--at building or system level--such that school improvement and reform goals can be attained,” (Knoff & Curtis, 1996, p. 406).

Because school reform is a long-term process, school psychologists should begin to seek active roles in the delivery of mental health services while simultaneously engaging in school reform efforts. Some of these roles according to Reeder, Maccow, Shaw, Swerdlik, Horton, and Foster (1997), include serving as a member of an interdisciplinary team, serving as the coordinator of the team, or serving as a university-based consultant. Serving as a member of an interdisciplinary team would include relaying information about assessment, consultation or intervention to other members of the team such as teachers, administrators, parents, or students (Reeder et al., 1997).

One reason for considering the school psychologist as the coordinator of such a group is that they are likely to be the only member to have training in consultation, group dynamics, team development, supervision, and case management (Reeder et al., 1997). Finally, school psychologists who have a relationship with a university can aid in

bringing additional funding into the schools and in conducting research (Reeder et al., 1997). These roles represent new directions for both the current practices of school psychologists and the future of school psychology (Reeder et al., 1997).

Additional roles that have been proposed for school psychologists by Power, McGoey, Heathfield, and Blum (1999) encompass the domains of intervention, program development, training, and applied research. The school psychologist is in an excellent position to assist with interventions for children with mental health problems by conducting functional assessments, collaborating with other team members to develop intervention plans, and providing technical assistance in the implementation of interventions (Power, et al., 1999) School psychologists can serve key roles in developing creative programs for service delivery with the help of community leaders. School psychologists also can contribute to the continuing education of other professionals in school and health care settings (Power, et al., 1999). Finally, school psychologists can research and evaluate program quality and effectiveness relating to mental health services to ensure that the services are yielding the best possible outcomes for students (Power, et al., 1999)

Nastasi, et al. (1998) have identified seven roles that school psychologists can fulfill in the delivery of mental health services in schools. These include:

“prevention specialists who help teachers and school administrators foster the development of competent individuals; child advocates who assist schools in establishing mechanisms for identifying and treating students with psychiatric disorders; direct service providers to help children with emotional disorders such as depression; and help to families who are at risk or have disabilities; trainers of

teacher consultants to extend the scope of consultation services in schools; health care service providers; system-level interventionists, and organizational facilitators in school reform and interagency collaboration.” (pp. 217-218).

Tharinger (1995) also proposed five fundamental roles for school psychologists in the delivery of mental health services. The first is a role in the development, implementation, and administration of new school-based and school-linked health service delivery models. The school psychologist’s role would include, responding to legislative, regulatory, and funding initiatives are presented by federal, state, and local governments, and developing and implementing mental health services in schools. The second role involves direct service provision. Here, the school psychologist would provide care relating to mental health disorders, psychological aspects of physical illness, and at risk behaviors. The third role would emphasize indirect service provision focusing on prevention of mental health disorders, physical illness, and at-risk behaviors, as well as providing consultation to improve health. The fourth role would be to interface health and educational outcomes to enhance positive outcomes for students. The final role would be for psychologists to take part in research and evaluation efforts that seek to determine each model’s effectiveness and to evaluate the outcomes for students who took part in the services. All of these roles provide for school psychologists to take an active approach in providing mental health services from the school level through the system level (Tharinger, 1995).

Summary

Many authors have similar ideas for the role of the school psychologist as it relates to the delivery of school-based mental health services. School psychologists

should take part in school reform efforts, should be involved in prevention and intervention services, and should take part in training, research, and evaluation of services. All of these roles should be integrated so that school psychologists can provide the optimal contribution to mental health services in schools.

In conclusion, the school psychologist's role with regard to mental health services has been discussed and defined in the professional literature. Over the next decade, initiatives to restructure education, community health and human services will reshape the experience of all students and all professionals who work with them. By coordinating and integrating the services provided by the community and the educational system, great opportunities for children could be realized. By addressing the barriers in mental health care services now, students of this generation and the next will be the beneficiaries of an improved system of health and educational care (Adelman, 1996).

The present study expanded the understanding of the amount of time school psychologists spend providing school-based mental health services and provided a more in depth examination of the specific types of mental health services being provided by school psychologists. This information may help lead to the expansion of the school psychologist's role in the delivery of mental health services in schools.

Chapter III

Method

This study explored the current role that school psychologists play in providing mental health services in schools. The study elaborated on how much time school psychologists spent delivering mental health services and the specific types of mental health services delivered. An additional purpose of this study was to examine factors that relate to the mental health services being provided by school psychologists. Factors such as years of training, desirability (whether school psychologist want to provide mental health services and why), present employment setting, support for mental health services by administration, staff, and psychological services department, and student to school psychologist ratio were examined.

This study involved analyses of an existing database in order to answer specific research questions. This chapter includes two sections. In order to provide an understanding of the nature of the data analyzed, the first section will describe procedures for the creation of the database. The second will include an explanation of the analytic procedures employed to answer each research question.

Creation of Database

A database was created by the Research Committee of the National Association of School Psychologists (NASP) to provide information about the delivery of mental health services in schools by school psychologists.

Participants. The participants in the generation of the database included 1,000 randomly selected “Regular members” of the NASP. Only NASP Regular members were included to gather information from persons who were identified as school psychologists and who practiced school psychology in a variety of settings. Student members of NASP (who had not yet entered the field), affiliated members (who are interested in the field, but who are not school psychologist), and members of the association through other membership or categories were not included in this study. Females and males, all ethnicities, and all age participants were included in this sample to adequately represent the population of school psychologists across the United States.

A letter requesting the participation of full-time school psychologists working in a school setting was mailed to the 1,000 randomly selected members of NASP by the Chair of the Research Committee. In the letter, school psychologists were asked to participate in an upcoming study on mental health issues in schools. As an incentive, prospective participants were informed that ten persons who completed and returned the survey would be randomly selected to receive \$50.00 in “NASP Bucks,” coupons that could be applied to the cost of NASP publications and other products. The sampling scheme was designed to represent practicing school psychologists. The role of the Research Committee was to compose and disseminate the survey and to enter data into the database, based on completed surveys returned. The Research Committee was neutral in the study having no affiliation or contact with prospective participants, or influence on the participants’ responses. All responses were treated confidentially. No identifying information was entered into the database and once data were entered, the original completed forms were destroyed.

Ethical Considerations. Prior to initiating efforts to generate the database, approval was obtained by the Chair of the Research Committee from the University of South Florida's Institutional Review Board for Social and Behavioral Sciences (IRB-02). Because most of the information submitted on the surveys was retrieved from recall of memory, there was minimal, if any, risk to participants. Information gathered about participant demographic characteristics, employment setting, and professional practices was kept in a confidential database; no identifying information was included in the database. Ethical issues such as deception and emotional or physical impact on participants were not relevant in this study.

Instrumentation. The survey was constructed to study the delivery of school-based mental health services by school psychologists across the United States. Data collection using the survey served several purposes. First, the survey (Appendix A) contained questions designed to gather general information such as demographic data pertaining to gender, ethnicity, languages spoken, salary, geographic location, and ratio of students to school psychologist. Second, the survey contained questions about employment conditions such as employment status, employment setting, and characteristics of students served. Third, information about mental health services delivered was obtained, such as the time invested in and the types of mental health services school psychologists provided, the level of support by administration, psychological services department, and staff for the delivery of mental health services, training, and factors associated with student success. Finally, the survey contained an open-ended question seeking to determine whether school psychologists wished to provide more mental health services as

well as reasons for their responses to this question. The survey included approximately 28 questions and should have taken about 15 minutes to complete.

One example of a question from the survey is, “What mental health services do you provide?” The possible responses included: affective education, crisis response, classroom management, classroom climate, externalizing disorders, internalizing disorders, mental health education, prevention/wellness, school discipline, related services, and other. Examples of other questions include, “What are the types of students you serve?” and “In what do you feel you need more training to provide more mental health services?” The format of the items was for the participants to select their responses from a list of possible responses.

The survey was developed by the NASP Research Committee. The process by which the survey was developed was by reviewing the relevant professional literature, as well as other relevant research instruments, such as those used by Curtis et al., 2002. Based on these reviews, questions were formulated for the survey. No published instruments could be identified that directly assessed the delivery of school-based mental health services delivered by school psychologists. Therefore, information pertaining to validity and reliability for the instrument were not available. However, the Research Committee conducted a pilot study using 25 practicing school psychologists to solicit their opinions and reactions to the survey. Specifically, they were asked about its usefulness, how easy it was to understand, and how long it took to complete. Next, members of the Research Committee reviewed the survey and provided feedback. Modifications were made as necessary to maximize the content-related validity, criterion-related validity, and construct-related validity.

Procedure. The survey was initially mailed to 1,000 randomly selected NASP “Regular members.” Mailing labels were computer-generated. As an incentive to respond, recipients were informed that ten people completing and returning the survey would be randomly selected to receive \$50.00 in NASP Bucks. All prospective participants were mailed the survey, a cover letter (Appendix B), and a postage paid, pre-addressed return envelope with an assigned a code. For this study, response to the survey was considered consent to participate. The participants were asked to return the survey within three weeks of its receipt. A follow-up postcard was mailed if a participant did not respond within three weeks. Four weeks following mailing of the postcard, another mailing was completed to all non-respondents that included the cover letter and survey, and a postage paid, pre-addressed return envelope. A code number was assigned to each prospective participant and was recorded on return envelopes. The coding was used to identify participants who had not responded for the purposes of follow-up mailings. After the entry of data from a returned survey, the original completed survey was destroyed. At the conclusion of the project creating the database, the list of prospective participations and assigned code members was destroyed.

Current Study

Analyses. A non-respondent bias analysis (Schweigert, 1994) was completed to compare obtained demographic information in the database to the NASP membership database to ensure that the present sample was representative. This analysis allowed the researcher to determine if a disproportionate numbers of school psychologist “type characteristics” (i.e. gender, ethnicity, education, salary, years of experience, location) were overly represented in the sample. Descriptive statistics were generated for each

question. The SPSS computer program was used to conduct the statistical analyses (SPSS, 2003).

To address the first research question concerning types of mental health services in which school psychologists engage, frequencies of participants indicating that they provided these services were tallied and the percentage of the sample was calculated. Then, the average number of hours was analyzed for each service and the percentage of each week devoted to this service was calculated by dividing the average number of hours by the total hours in an average work week (40). Finally, a confidence interval using the Poisson distribution (Schweigert, 1994) was developed around the average number of hours per week.

To answer the second research question of whether school psychologists want to be more involved in providing mental health services, as well as the reasons for their responses, a confirmatory thematic analysis (Schweigert, 1994) of the responses to the open-ended question was utilized. Initial themes of responses to the qualitative question were hypothesized based on past research. After the accumulation and review of data, these themes were revised or expanded based on participants' responses. This process is known as the constant comparative analysis of themes (Tashakkori & Teddlie, 2003).

The third research question, asking to what extent school psychologists who provide mental health services report that they are supported by administration, department, and staff, was analyzed by tallying the frequency and percentage of participants indicating each separate level of support. The overall mean average of support was then calculated for administration, department, and staff.

The fourth research question addressing in what types of service settings school psychologists primarily work with students and families with mental health problems was analyzed by tallying the frequency and percentage of participants identifying each service setting.

The fifth research question investigated the factors that school psychologists report contribute to their success in the delivery of mental health services. Participants were asked to rank order a list of services factors in terms of those that they believed contributed to their success in the delivery of mental health services. The ranked factors and the mean rank for each factor were analyzed.

The final research question investigated in what areas of mental health services delivery do school psychologists report that they need more training. Participants were asked to rank order a list of mental health services for which they believed they needed more training. The top three ranked mental health services were identified, the mean rank for each service, and the number and percentage of participants selecting each service were examined.

Chapter IV

Results

The present study was designed to examine the current role that school psychologists play in providing mental health services in schools. This study elaborated on how much time is spent delivering mental health services and the types of mental health services that school psychologists are delivering. This study also examined factors that are related to the amount of time a school psychologist spends delivering these services such as desirability, support by administration, staff, and department, service settings, factors that contribute to success in the delivery of mental health services, and school psychologist training. The purpose of this chapter is to address and answer the following specific research questions:

1. In what types of mental health services do school psychologists engage?
2. Do school psychologists want to be more involved in providing mental health services? Why or why not?
3. To what extent do school psychologists who provide mental health services report that they are supported by administration, by department, and by staff?
4. In what types of service settings do school psychologists primarily work with students and families with mental health problems?
5. What are the factors that school psychologists report contribute to their success in the delivery of mental health services?

6. In what areas of mental health service delivery do school psychologists report that they need more training?

Demographic Information

The research questions were addressed through analyses of a database developed by the Research Committee of the National Association of School Psychologists (NASP). To create the database, a random sample of 1,000 school psychologists who were Regular members of the NASP were asked to complete a survey. First, 1,000 surveys were mailed to the prospective participants. After three weeks, prospective participants who had not responded received a postcard reminding them of the study and asking them to respond. If a prospective participant had not responded within four weeks after the postcard was mailed, a final mailing was completed that included a cover letter, the original survey, and a postage-paid, preaddressed return envelope. Of the first 1,000 surveys that were originally mailed and the second postcard mailing, 361 completed surveys were returned. In responses to the final mailing, 102 additional surveys were returned. Twenty-three participants mailed the surveys back and for various reasons, (e.g. retirement, change of career), were removed from the participant list. In total, surveys were completed and returned by 463 out of a possible 977 respondents, representing a 47.4% response rate. A 50% response rate is generally considered adequate for analysis of research results (Babbie, 1990). Therefore, the results of this study should be considered preliminary and interpreted cautiously. However, where applicable, information was compared to the NASP membership (2000), to ensure that the database sample was representative of the field of school psychology.

Data regarding gender, ethnicity, and educational level are reported in Table 1. It is clear that the field of school psychology is primarily female. In 1999-2000, more than 70% of all school psychologists and approximately three of four practitioners were women (Curtis, et al., 2002). Most school psychologists are Caucasian. In the database used in the present study, members of all ethnic minorities were found to represent only 5.5% of the field. Educational preparation of school psychologists was also an area of interest. NASP training standards require specialist level training (60 graduate semester hours/90 graduate quarter hours or beyond) for entry into professional practice (NASP, 2000). Almost 96% of those responding reported that their preparation had been at the 60-hour/specialist level or higher.

Table 1

Demographics Characteristics in Database (N = 463) & NASP Membership 2002

Demographics	<i>Present Study</i>		<i>NASP Membership</i>
	<i>n</i>	<i>%</i>	<i>%</i>
Gender			
Female	361	78	72
Male	102	22	30.4
Ethnicity			
Caucasian	424	91.6	92.8
Hispanic	21	4.53	3.1
African-American	7	1.51	1.9
Asian/Pacific Islander	5	1.08	.6
Other	1	.216	.9
Native American Alaskan Native	0	0	.6
Highest Degree Earned			
Educational Specialist	165	35.64	28.2
Masters +30	158	34.13	NA
Doctorate	120	25.92	30.2
Masters	18	3.89	NA
Bachelors	2	.43	NA

Data regarding annual salary are presented in Table 2. Of the school psychologists responding, 23.7% made \$45,000 or less. Salaries of \$45,000 or more were reported by 75% of the total sample.

Table 2

Annual Salary (N = 463)

Salary	<i>n</i>	%
55,000+	214	46.22
50,001-55,000	81	17.49
45,001-50,000	53	11.46
40,001-45,000	41	8.86
35,001-40,000	30	6.48
30,001-35,000	16	3.46
20,001-25,000	12	2.5
25,001-30,000	6	1.30
0-20,000	5	1.08

As reported in Table 3, the average number years of experience was 12.73 with a standard deviation of 9.11, with a range of 1 to 40 years. Therefore, with a confidence interval of 95%, it can be concluded that the average number of years working as a school psychologist for this sample was between 11.90 and 13.56 years.

Table 3

Years of Experience (N = 463)

Years	<i>M</i>	<i>SD</i>	<i>95 %CI</i>
Years of Experience	12.73	9.11	11.90 - 13.56

Presented in Table 4, over 49.7% of the total sample worked in a city setting. The total percentage of school psychologists working in suburban and rural locations was approximately 66%. It is demonstrated by the frequencies and percentages that the categories of large city, small city, and rural employment setting are fairly evenly represented, while representation for suburban settings was somewhat higher. It should be noted that the percentages reported totaled more than 100% because school psychologists work in more than one employment setting and could identify more than one setting in their responses.

Table 4

Employment Setting (N = 463)

Setting	<i>n</i>	%
Suburban	184	39.74
Small City	127	27.43
Rural	124	26.78
Large City	103	22.25

Research Question # 1: In what types of mental health services do school psychologists engage?

The first research question was developed to identify the types of mental health services in which school psychologists engage and the number of hours per week on average that they provide these services. To answer this question, the frequencies of

participants indicating that they provided each service was tallied and the percentage of the sample was calculated. Then, the average number of hours was analyzed for each service and the percentage of the week devoted to this service was calculated by dividing the average number of hours by the total hours in an average work week (40). Finally, a confidence interval using the Poisson distribution was developed around the average number of hours per week. If a school psychologist did not mark a particular mental health service, a zero was reported for his/her response. Zeros were included in the mean hours per week. As can be seen in Table 5, most school psychologists reported that they spend approximately 40.80% of the 40-hour work week engaging in the mental health services of assessments and diagnosis and academic consultation. Mental health services such as individual therapy/counseling, family therapy/counseling, group therapy/counseling, substance abuse counseling comprised, and behavior management consultation only 19.21% of school psychologists' 40 hour work week. The results are presented in Table 5.

Table 5

Mental Health Services Provided By School Psychologists (N = 463)

Service	<i>n</i>	% sample	<i>M</i>	% work week	<i>CI</i>
Assessment and Diagnosis	433	93.52	12.58	31.45	12.27-12.92
Academic Consultation	382	82.51	3.74	9.35	3.57-3.91
Behavior Management Consultation	402	86.83	3.73	8.43	3.56-3.91
Report Writing	30	NA	3.62	NA	NA
Individual Therapy/Counseling	277	59.83	2.78	6.95	1.03-2.94
Designing/Administering Individual Service Plans	214	46.23	1.90	4.75	1.78-2.03
Supervision	8	NA	1.73	NA	NA
Program Development and Administration	125	27	1.20	3.00	1.12-1.32
Crisis Intervention	269	58.10	1.19	2.96	1.09-1.29
Family/Child Advocacy	143	30.89	1.01	2.53	0.92-1.97
Educational Support	141	30.45	0.99	2.48	0.90-0.99
Early Intervention Services	126	27.21	0.90	2.25	0.38-0.99
Social Skills Training	177	38.23	0.89	2.23	0.81-0.98
Personnel Training (Staff Development)	175	37.80	0.85	2.13	0.7-0.94
Group Therapy/Counseling	142	30.67	0.83	2.08	0.75-0.92
Family Therapy/Counseling	67	14.47	0.52	1.3	0.46-0.59
Research and Evaluation	60	12.96	0.36	0.90	0.31-0.42
Vocational Counseling	25	5.39	0.12	0.30	0.09-0.16
Substance Counseling	20	4.32	0.06	0.15	0.04-0.09

Research Question #2: Do school psychologists want to be more involved in providing mental health services? Why or why not?

The second research question was developed to determine if school psychologists want to be more involved in providing mental health services and the reasons for their response. Out of 463 respondents, 344 (74.30%) indicated that they would like to be involved in providing more mental health services, 106 (22.99%) indicated that they would not like to be involved in providing more mental health services, and 2 participants (.43%) were undecided. To interpret participant responses of yes or no, themes were generated for each response. Themes representing the most responses are reported in Table 6.

Table 6A

Response of “Yes” Open-Ended Question

Response	<i>n</i>	%
Mental health needs are increasing	55	11.9
Many problems (academic and behavioral) stem from mental health problems	38	8.21
I believe in prevention and early intervention	32	6.91
Too much time spent in assessment	29	6.26

Table 6B

Responses of “No” Open-Ended Question

Response	<i>n</i>	%
Community already provides them and is their responsibility School not appropriate setting	23	4.97
Not enough time	19	4.10
Already devote too much time to Mental Health Services	12	2.59
Nice balance already	9	1.94

The themes generated represent the reasons that were most frequently provided for each response. In addition, four full reasons offered for the response of “Yes” and for the response of “No” were selected as being illustrative of the four themes listed above.

The full responses were as follows:

“Yes”- desire to provide more mental health services:

The school is becoming the only structured, stable, predictable environment in a child’s life. Reaching troubled students early is often their best and only chance at developing skills that will give them hope for school and life success. School is where they learn and develop cognitive skills and relational problem solving skills that build a sense of self efficacy. A troubled mind is handicap in learning.

The current focus in our own school system in “leaving no child left behind” asks school psychologists and other support staff to justify our impact on student achievement. (i.e. statewide testing to determine grade promotion). However, any efforts to implement projects that focus on children’s mental health issues are met with scrutiny and deemed inappropriate with regard to statewide testing.

Yes, however, at the present time it is not possible due to time constraints and student to school psychologist ratio. In this district, 20% of our student population is in special education. This is the highest in the state of N.J. Most of our schools are out of compliance with evaluations and reevaluations and attending to follow the time lines in the law. At times we function more like clerk typists than school psychologists.

Yes, I believe that school-based mental health services have the potential for being the most effective if time and resources are provided to implement research-based interventions and monitor follow through progress.

“No”- desire to provide more mental health services:

We need to work with families, not children in isolation in the schools. If you mean opening clinics on campus for families, I think that school needs to remain an educational setting and not blend the mental health services with educational services.

No time due to the amount of assessment needed.

I feel that home or community based therapy is more effective because it involves the family to a greater extent and it can be more continuous (no breaks or summer vacation).

I like the balance I have now.

Research Question #3: To what extent do school psychologists who provide mental health services report that they are supported by administration, by department, and by staff?

The third research question was developed to address the extent to which school psychologists who provide mental health services report that they are supported by administration, by department, or by staff. A rank weight of 1 indicated “no support”, 2 “slight support”, 3 “average support”, 4 “more than average support”, and 5 “much support”. The results are presented in Tables 7A-7C. Table 7A-7C report that school psychologists feel relatively the same amount of support in all three areas with support from department being the lowest mean level of support and staff support being the highest mean level of support.

Table 7A

Administration Support (N =463)

Support	<i>n</i>	%	<i>Overall M</i>
No Support	27	5.83	
Slight Support	91	19.6	
Average Support	146	31.5	
More than Average Support	99	21.38	
Much Support	71	15.33	
No Response	30	6.48	
			3.22

Table 7B.

Staff Support (N =463)

Support	<i>n</i>	%	<i>Overall M</i>
No Support	11	2.4	
Slight Support	58	12.5	
Average Support	195	42.12	
More than Average Support	118	25.4	
Much Support	49	10.6	
No Response	33	7.13	
			3.33

Table 7C.

Department Support (N = 463)

Support	<i>n</i>	%	<i>Overall M</i>
No Support	30	6.5	
Slight Support	92	19.9	
Average Support	129	27.9	
More than Average Support	99	21.4	
Much Support	67	14.5	
No Response	46	9.9	
			3.20

Research Question #4: In what types of service settings do school psychologists primarily work with students and families with mental health problems?

To answer this question this, the frequency and percentages for each setting were examined. These data are presented in Table 8. It can be seen that most school psychologists are providing mental health services in a school-based program or school-based crises delivery setting.

Table 8

Service Settings (N = 463)

Service Setting	<i>n</i>	%
School-Based Program	418	90.28
School-Based Crises Delivery	169	36.50
Private Practice	36	7.76
Day Treatment Center	22	4.75
Outpatient mental health clinic/center	19	4.10
Residential Treatment Center	10	2.16
Day Care	10	2.16
Charter School	9	1.94
Psychiatric Hospital	5	1.08
General/Community Hospital	5	1.08
Physician's Office/Health Clinic	5	1.08
Shelter	4	.86
Other		
Preschool	2	.43
University	1	.22
Autism Center	1	.22

Research Question # 5: What are the factors that school psychologists report contribute to their success in the delivery of mental health services?

The fifth question in this study sought to investigate the most important factors that school psychologists report contribute to their success in the delivery of mental

health services. Participants were asked to rank order a list of factors in terms of those that they believed contributed to their success in delivering mental health services. Table 9 presents the mean ranked factors.

Table 9

Factors that Contribute to Success (N =463)

Factor	<i>M Rank</i>
Training	1.15
Administrative Support	2.55
Teacher Willingness/Acceptance	3.12
Staff Support	4.01
Funding	4.89
School Psychologist/Student Ratio	5.36
Parent/Family Support	5.55
School Problem-Solving Team	6.75
Access to/Linkages with Community Resources	8.07

Research Question # 6: In what areas of mental health service delivery do school psychologists report that they need more training?

To address this question, participants were asked to choose and rank order three areas that are most important for which they believe they needed more training. Table 10 presents the top three mental health services selected and the mean rank for each area.

Table 10

Training Needed in Mental Health Services (N =463)

Mental Health Services	<i>M</i>
Prevention of Emotional and Behavioral Problems	1.78
Behavior Management in the Classroom	2.13
Social Skills Training	3.33

Chapter V

Discussion

The purpose of this chapter is to summarize the findings relating to each research question and to discuss those findings within the context of previous research and present conclusions. Additionally, this chapter will offer a discussion of the limitations of this study, as well as recommendations for future research.

Summary of Results

Based on the demographic information that was obtained from the study, it can be concluded that this sample of school psychologists is predominantly female, Caucasian, has attained an educational level of at least educational specialist, and has worked an average of 12.73 years. Results indicate that most of these school psychologists deliver mental health services in a school setting (90.28%). In comparison to the NASP 2000 membership, it would appear that this sample is similar in demographic characteristics and, therefore, is representative of the field of school psychology.

The results indicate that school psychologists devote most of their time to assessment and diagnosis and academic consultation. Collectively, in this sample, school psychologists reported spending 40.08% of the 40-hour work week delivering services in these areas of assessment and consultation. In contrast, past studies conducted by Short and Rosenthal (1995), demonstrated that considerable more time was spent in assessment (63.2%). In the present study, mental health services such as individual therapy/counseling, family therapy/counseling,

group therapy/counseling, substance abuse counseling, and behavioral management consultation comprised only 19.21% of school psychologists' 40 hour work week. These findings are not consistent with the findings of Lazega et al., 2002 in which school psychologists spent over 80% of their time in assessment-related activities, but 13.10 hours of their work week (32.75%) providing mental health services. Survey methodology may have accounted for these differences. As the basis for the present study, participants were asked to recall the hours that they provided mental health services during the prior week. In the Lazega et al., (2002) study, participants were to asked to maintain a weekly log of mental health services they provided over a period of 4 weeks. Additionally, services identified by the present study as mental health services were not identical to those of the Lazega et al., study. In the end, there are notable differences between the findings of this study and those of the Short and Rosenthal (1995) and Lazega et al., (2002). The methodology in the Lazega et al., study may have been more valid and reliable since psychologists had to keep a weekly log and indicate what services they had provided that day along with how long they were involved in these services. This may have produced more accurate results, however, a much smaller sample size (88 participants) was produced with this type of methodology. The present study's methodology may have had a limitation in that participants were asked to recall the services they had provided in the past week, however, a much larger sample size was attained. It is apparent that more information is needed with regard to the amount of time that school psychologists spend in delivery of mental health services. This may be accomplished by surveying psychologists with a more direct survey just focusing on time and type of mental health services delivered.

In addition to the amount of time that school psychologists currently spend delivering mental health services, it is important to know if they are satisfied with that reality, (i.e. do they actually want to be involved in providing more mental health services). The results indicate that approximately three out of four school psychologists participating indicating a desire to deliver more mental health services. Participants also were asked to provide reasons for their answers. The themes generated from the participants' responses revolved around some common ideas for wanting or not wanting to be involved in providing mental health services. Frequently, a response of wanting to be more involved in the delivery of mental health services was followed by reasoning that there is a great need for mental health services and that prevention and early intervention are the best strategies for helping students. School psychologists also felt that there is too much time spent in assessment-related activities. If the participants answered that they did not want to be involved in the delivery of mental health services, common reasons for this response were that the community was more appropriate for addressing mental health needs and that there is not enough time available for school psychologists to provide these services. These findings are consistent with findings by Roberts and colleagues (1994) that indicated that school psychologists desire to be less involved in assessment and more involved in intervention. The Roberts, et al (1994) study indicated that school psychologists wished to abandon restricted roles and to engage in alternative roles described by Reschly (1988) and other authors, including interventions. As noted above, the majority of school psychologists participating in the present study wanted to be more involved in providing mental health interventions, thereby providing more support for the changing role of school psychologists.

The results of the questions relating to support for mental health services suggest that school psychologists in this sample feel that they have average support from teachers and school administration. Ironically, however, these school psychologists, on average, felt that they had slightly less support from their own school psychological services department. When the results were analyzed investigating what areas (administration, staff, or department) had the highest percentage of school psychologist indicating no support or slight support, departmental support was identified by 26.4% of school psychologists as providing the least amount of support. Administrative support was identified by 25.43% of school psychologists as providing no or slight support. Staff support was only identified by 14.9% of school psychologists providing no or slight support.

Contextual support is critical to the provision of mental health services and to role expansion, in general. The social environment of organizations such as schools and school districts, and professional relationships between school psychologists and other professional personnel like teachers and administrators are critical to efforts to increase emphasis intervention-focused services, including mental health services (Lochman, 2003). School personnel who perceive that school support is negative have been found to think that the introduction of new innovations in their schools is a burden (Lochman, 2003).

School psychologists may feel slightly less support from a district psychological service office because, generally, school psychologists are often held accountable for the number of testing cases they complete. Mental health services such as counseling and consultation may not be seen by the psychological services department as being part a

priority aspect of the school psychologist's role when the departments themselves are under pressure to complete eligibility evaluations and NCLB and IDEA legislation. Consequently, these departments may be perceived as less supportive of school psychologists delivering mental health services. It is important to note this is perceived support by the school psychologists participating and does not necessarily represent the actual values or priorities of psychological services departments. On the other hand, there is notable irony in the fact that, at a time when there is a perceived need for more mental health services and the clear majority of school psychologists wish to provide more mental health services, school psychologists do not perceive support for that change from the leadership of their own organizational unit. In regard to low administrative support, the same accountability issues can be applied. With the new IDEA and NCLB legislation, principals are being pressured to ensure that edibility needs are met and Medicaid dollars are being brought into schools by school psychologists. Therefore, support of school psychologists providing mental health may be low since these services may not be in direct conjunction with new legislation. Staff was reported to be most supportive of school psychologists providing mental health services. This may be because teachers want help and mental health services are perceived as intervention services aiding in behavior or academic problems that children demonstrate.

This study also investigated the most important factors that school psychologists believe contribute to their success in the delivery of mental health services. Participants responded that the number one factor they believed contributed to their success was training, (i.e., their professional practices, followed by administrative support). Key factors that may affect how individuals within the school successfully use a new program

involves the type of professional training and support available (Ringeisen, Henderson, Hoagwood, 2003). School psychologists cannot be expected to provide mental health services without adequate, appropriate training. The degree of the intensity of the training can be anticipated to affect intervention outcomes (Lochman, 2003). Therefore, training in the delivery of mental health services needs to be specific to these services and directly tied to how these services improve student outcomes. Given the somewhat limited opportunities for knowledge and skill development in the area of mental health that are available in the specialist-level training programs, systematic and intensive attention to this area should be provided through continuing professional development programs. The third most important factor reported was teacher willingness to be involved in mental health service delivery which speaks to the relevance of support by staff. Therefore, it can be argued that the interaction of appropriate, professional training and a supportive school climate are essential to the establishment of effective, school-based mental health programs (Elias, 1997).

Because training was identified as one of the most important factors contributing to the success of mental health services, addressing the question about services for which school psychologists would like more training is timely. Training in prevention of emotional and behavioral problems, behavior management in the classroom, and social skills training were service areas identified most often by school psychologists participating in this study. According to NASP (2000), preparation in the areas of assessment, intervention, counseling, and consultation is a primary training goal. Under the NASP training standards, school psychologists should acquire the “knowledge of behavioral, mental health, collaboration, and other consultation models and their

application to particular situations. School psychologists should provide or contribute to prevention and intervention programs that promote the mental health and physical well being of students” (NASP, 2000, p. 15). The results of this study suggest that school psychologists want more training in prevention and intervention methods, rather than in assessment and diagnosis. These findings are aligned with the NASP standards for training.

In addition, all three of these areas for which school psychologists want more training fall under the umbrella of prevention skills. The thrust of this type of training is unlike traditional training in testing that is based on a reactive approach to diagnosing problems once they already exist. The desire of school psychologists for more prevention training, may also suggests a need for a shift in the paradigm of school psychology training programs away from a reactive approach toward students’ educational/emotional concerns toward a prevention-oriented, problem-solving approach. This finding is consistent with a central theme and several major recommendations that emerged from the 2002 Invitational Conference on the Future of School Psychology. Movement of the field to a much greater emphasis on prevention and health promotion was identified a primary goal for the future of the field. In fact, it was suggested that school psychology engage in a major paradigm shift in which public health model would guide the field (Sheridan & D’Amato, 2004).

Much attention needs to be given to the factors in the school environment that are critical to a positive mental health climate and to the successful delivery of mental health services. Improvements in understanding the specific services to be delivered and the

influences of support and training in delivering mental health services are essential in increasing the delivery of effective interventions to students in the need of these services.

Limitations of Study

There were several limitations to the present study. One limitation is sampling bias. Because the sample used in the development of the database consisted of only members of the National Association of School Psychologists, it may not be entirely representative of all school psychologists across the United States. However, NASP has over 21,500 members and represents school psychologists from all levels of training and from different practice settings. Fagan and Wise (2000) contend that membership in NASP is very likely the best representation of the field of school psychology.

The second limitation also involved methodology relating to development of the database, specifically, the instrument used, and represents a potential threat to internal validity. The survey asked school psychologists to recall the mental health services that they had provided during the preceding week. This approach introduces the problem of recall bias (Schweigert, 1994). School psychologists may not have accurately recalled the correct number or types of services that they provided. They had to reflect back on prior experiences and this may have resulted in inaccurate information being provided. It should be noted, however, that the potential of recall bias was very likely limited given the recall period was only one week earlier.

A third limitation was that participants may have been inclined to provide socially desirable responses. By providing this survey, researchers were under the assumption that school psychologists do provide some mental health services, and were essentially inferring that the delivery of mental health services is a desirable function for school

psychologists. If a school psychologist did not provide such services at all, he/she may have been more inclined to respond falsely. In addition, because the participants would have known the purpose of the study, they may have overestimated the types and amounts of mental health service they delivered (Schweigert, 1994).

The fourth limitation potentially impacting this study was the somewhat low response rate. According to Babbie (1990), a response rate of at least 50% is generally considered adequate for the analysis and reporting of survey information. This survey approached, but did not achieve the level suggested by Babbie, yielding a 47.4% response rate. Despite these limitations, the results demonstrated consistency with previous research on the demographic characteristics, employment conditions, and professional practices of school psychologists (Curtis, et. al, 2002; Lazega, et al, 2002).

Recommendations for Future Research

Due to the limitations of this study, several recommendations are suggested for future research. With regard to instrumentation, review of the survey used in this study should be conducted to ensure acceptable reliability and validity. This could be done by using this instrument repeatedly to determine the consistency of results obtained. From the repeated uses of the instrument, changes could be made such as modifying questions, or changing the order of the questions to ensure the best possible results. Future researchers may also want to consider using a different sampling procedure to ensure randomization of participants. For example, instead of taking a random sample of school psychologists based on NASP or other association memberships, perhaps a different methodology could be used to secure a nationally representative sample.

Further analyses of the data also are suggested. Multiple regression analyses and correlational analyses might prove helpful in investigating the influence of factors such as gender, geographic region, ratio of students to school psychologist, support for mental health services, or years of experience on the types and amounts of mental health services provided by school psychologists. By understanding what promotes mental health services delivered by school psychologists, training programs and school environments can implement changes that place a greater emphasis on mental health.

Additionally, future research might generate new knowledge of mental health service delivery. For example, questions relating to the characteristics of students who receive mental health services and venues for training relative to mental health services such as state and national associations need to be analyzed as well.

Finally, research needs to be conducted to understand how mental health services are associated with different student outcomes. For example, research is needed that examines the relationship between mental health services and changes in student academic or behavioral outcomes.

Conclusions

The mental health needs of children and adolescents are escalating (Adelman et al., 1998), calling for increased mental health services by school psychologists and other health professionals to enhance students' educational gains. It has been estimated that over 20% of students experience serious mental health problems (Adelman et al., 1998). However, the economic availability and staff support to ensure that these services are provided to students are decreasing. For children to grow both academically and emotionally, it is important that children's mental health be addressed in schools.

Because the mental health needs of children are so vital, it is the responsibility of professionals, such as school psychologists, to be part of a school team that supplies these services. Researching school psychologists' roles in the delivery of mental health services can provide information on how much time school psychologists engage in providing mental health services and what is lacking in training and support for such services. The investigation of factors such as these can further the development of school policies and training programs that facilitate mental health services being provided to students. In addition, by comparing these results with those of past research, the field of school psychology can analyze and predict trends in the future role of school psychologists. The information can aid in the process of understanding where school psychology is today and where it should be in the future.

References

- Adelman, H. S. (1996). Restructuring education support services and integrating community resources: Beyond the full service school model. *School Psychology Review, 25*, 431-445.
- Adelman, H., & Taylor, L. (1998). Mental health in schools: moving forward. *School Psychology Review, 27*(2), 175-90.
- Babbie, E. (1990). *Survey research methods*. (2nd ed.) Belmont, CA: Wadsworth.
- Carlson, C., Paavola, J., & Talley, R. (1995). Historical, current, and future models of schools in health care service delivery settings. *School Psychology Quarterly, 10*, 184-202.
- Centers for Disease Control and Prevention*. (2000). Retrieved date 2002. www.ced.gov.
- Cheramine, G. M., & Sutter, E. G. (1993). Role expansion in school psychology: The need for primary and secondary prevention services. *Psychology in the Schools, 30*, 53-59.
- Children's Defense Fund*. (2000). Retrieved date 2002. www.childrensdefensefund.com.
- Child Trends*. (2001). Retrieved date 2002. www.childtrends.com.
- Curtis, M. J., Hunley, S. A., Grier, E C. (2004). The status of school psychology: Implications of a major personnel shortage. *Psychology in the Schools, 41*(4), 431-442.
- Curtis, M. J., Grier, J. B., Abshier, D. W., Sutton, N. T., & Hunley, S. A. (2002). School

Psychology: Turning the corner into the twenty-first century.

Communiqué, 30, 8, 1-5.

Curtis, M. J., Hunley, S. A., Walker, K. J., & Baker, A. C. (1999). Demographic characteristics and professional practices in school psychology. *School Psychology Review*, 28, 104-116.

Dryfoos, J. G. (1995). Full services schools: Revolution or fad? *Journal of Research on Adolescence*, 5, 147-172.

Dryfoos, J. G. (1998). School-based health centers in the context of education reform. *Journal of School Health*, 68(10), 404-08.

Elias M. (1997). Reinterpreting dissemination of prevention programs as widespread implementation with effectiveness and fidelity. In R. P. Weissbergh, T. Gullotta, R.L. Hampton & B.A. Ryan (Eds.), *Healthy children 2000: Establishing prevention services* (pp. 253-289). Thousand Oaks, CA: Sage.

Fagan, T. K., & Wise, P.S. (2000). School psychology; Past, present, and future. Bethesda, MD: National Association of School Psychologists.

Farling, W H., & Hoedt, K. C. (1971). National survey of school psychologists. Washington, DC: National Associations of School Psychologists.

Flaherty, L. T., Weist M. D. & Warner, B. (1996). School-based mental health services in the United States: History, current models, and needs. *Community Mental Health Journal* , 32, 341-352.

Florida Department of Education. (2000). Retrieved date 2002.

www.floridadepartmentofeducation.com.

Graden, J. L., & Curtis, M J. (1991). A demographic profile of school psychology: A

report to the NASP Delegate Assembly. Silver Springs, MD: National Association of School Psychologists.

Hartshorne, T. S., & Johnson, M. C. (1985). The actual and preferred roles of the school psychologist according to secondary school administrators. *Journal of School Psychology, 23*, 241-246.

Huebner, E. S., & Mills, L. B. (1994). Burnout in school psychology: The contribution of personality characteristics and role expectations. *Special Services in the Schools, 8*(2), 53-67.

Kestenbaum, J. (2000). What it will be: On-site mental health programs. *Journal of Child and Adolescent Psychiatry, 39*.

Knoff, H. M., & Curtis, M. J. (1996). Introduction to mini-series: Organizational change and school reform: School Psychology at a professional crossroad. *School Psychology Review, 25*, 406-408.

Knoff, H. M. & Curtis, M. J., & Batsche, G. M. (1997). The future of school psychology: Perspectives on effective training. *School Psychology Review, 26*, 93-103.

Kolbe, L. J., Collins, J., & Cortese, P. (1997). Building the capacity of schools to improve the health of the nation: A call for assistance from psychologists. *American Psychologist, 52*, 356-365.

Lazega, B., Batsche, G., Curtis, M. J. (2003). The delivery of school based mental health Services delivered by school psychologists. NASP, 2003.

Lochman, J. E. (2003). Commentary: School contextual influences on the dissemination of interventions. *School Psychology Review, 32* (2), 174-177.

McDaid, J. L., & Reifman, A. (1997). *Promoting student mental health, learning, &*

welfare: 1995-1996 School Psychology Accountability Studies. San Diego, CA: San Diego City Schools.

Nabors, L. A., Weist, M. D., Tashman, N. A., & Myers, C. P. (1999). Quality assurance and school-based mental health services. *Psychology in the Schools*, 36(6), 485-93.

NASP: Standards for Training and Field Placement in School Psychology. (2002).

Retrieved date 2002. www.nasp.org

Nastasi, B. K. (1998). A model for mental health programming in schools and communities. *School Psychology Review*, 27, 165-174.

Nastasi, B. K., Varjas, K., Berstein, R., & Pluymert, K. (1998). Mental health programming and the role of school psychologist. *School Psychology Review*, 27(2), 217-32.

Nastasi, B. K. (2000). School psychologists as mental health care providers in the 21st century: Conceptual framework, professional identity, and professional practice. *School Psychology Review*, 29, 540-554.

National Association of State and Mental Health Program Directors & The Policy maker partnership for Implementing IDEA. (2002). Mental health, schools and families working together for all children and youth: toward a shared agenda. *The National Association of State Directors of Special Education*, 1-48.

National Association of School Psychologists. (2002). Retrieved date 2004.

<http://www.naspoline.org/certification>.

National Center for Children in Poverty. (2001). Retrieved date 2002. www.nccp.org.

National School Safety Center. (2001). Retrieved date 2002.

www.nationalschoolsafetycenter.com.

- Porter, G., Epp, L., & Bryant, S. (2000). Collaboration among school mental health professionals; a necessity, not a luxury. *Professional School Counseling, 2*(5), 315-322.
- Power, T. J., McGoey, K. E., Heathfield, L. T., & Blum, N. J. (1999). Managing and preventing chronic health problems in children and youth: School Psychology's expanded mission. *School Psychology Review, 28*(2), 251-63.
- Pumariega, A. J., & Vance, H. R. (1999). School-based mental health services: The foundation for systems of care for children's' mental health. *Psychology in the Schools, 36*(5), 371-78.
- Reeder, G. D., Maccow, G. C., Shaw, S. R., Swerdlik, M. E., Horton, C. B., & Foster, P. (1997). School psychologists and full-service schools: Partnerships with medical, mental health, and social services. *School Psychology Review, 26*(4), 603-621,
- Reschly, D. J. (2000). The present and future status of school psychology in the United States. *School Psychology Review, 29*, 507-522.
- Reschly, D. J., & Wilson, M. S. (1995). School psychology practitioners and faculty: 1986 to 1991-92 trends in demographics, roles, satisfaction, and system reform. *School Psychology Review, 24*(1), 62-80.
- Ringeisen, H., Henderson, K., & Hoagwood, K. (2003). Context matters: School and the "research to practice gap" in children's mental health . *School Psychology Review, 32*, 153-168.
- Roberts, A. H., & Rust, J. O. (1994). Role and function of school psychologists, 1992 -1993: A comparative study. *Psychology in the Schools, 31*, 113-119.

- Schweigert, W. A. (1994). *Research methods & statistics for psychology*. Brooks/Cole Publishing Co. Belmont, California.
- Sheridan, S. M. & D'Amato, R.C. (2004). Pattering to chart our futures: School Psychology Review and School Psychology Quarterly combined issue on the multiside conference on the future of school psychology. *School Psychology Review, 1*, 7-11.
- Short, R. J., & Rosenthal, S. L. (1995). Expanding roles or evolving identity? Doctoral school psychologists in school vs. non-school settings. *Psychology in the Schools, 32*, 296-305.
- Smith, D. K. (1984). Practicing school psychologists: Their characteristics, activities, and populations serves. *Professional Psychology: Research and Practice, 15*, 798-810.
- Smith, D. K., Clifford, E.S., Hesley, J., & Leifgren, M. (1992). The school psychologist of 1991: A survey of practitioners. Paper presented at the annual meeting of the National Association of School Psychologists, Nashville, TN.
- SPSS (2003). Retrieved date 2003. <http://www.spss.com/>
- Substance Abuse and Mental Health Services Administration. (2000). Retrieved date 2002. www.samsha.gov
- Surgeon General. (2000). Retrieved date 2002. www.surgeongeneral.gov.
- Tashakkori, A., & Teddlie, C. (2003). *Handbook of mixed methods in social and behavioral research*. Thousand Oaks, CA: Sage.
- Tharinger, D. (1995). Roles for psychologists in emerging models of school-related health and mental health services. *School Psychology Quarterly, 10*, 203-216.

U.S. Department of Education. (1996). *Mapping out the national assessment to Title I; The interim report*. Washington, DC: Author.

Webster, M. (2002). *Webster's New Riverside Dictionary*. NY, NY, Houghton Mifflin Company.

Weist, M., D., & Christodulu, K., V. (2000). Expanded school mental health programs: advancing reform and closing the gap between research and practice. *Journal of School Health*, 70(5), 195-200.

Appendices

Appendix A

**Mental Health Services Survey
For School Psychologists**

A study by the: National Association of School Psychologists Research Committee

I. General Information

1. Gender: **A.** Male _____ **B.** Female _____

2. Ethnicity:
A. Caucasian _____
B. Hispanic _____
C. African-American _____
D. Asian/Pacific Islander _____
E. Native American, Alaskan Native _____
F. Other (Please Specify) _____

3. Do you fluently speak a language other than English?
Yes _____ No _____ What language(s)? _____

4. What is the percent of minority students that you work with in your schools?

5. What is your annual salary?
Less than \$20,000 _____ \$20,001-25,000 _____ \$25,001-30,000 _____
\$30,001-35,000 _____ \$35,001-40,000 _____ \$40,001-45,000 _____
\$45,001-50,000 _____ \$50,001-55,000 _____ \$55,000+ _____

6. What is your highest level of formal training as a school psychologist?
A. Bachelors _____
B. Masters _____
C. Master + 30 hours _____
D. Educational Specialist. _____
F. Doctoral Level _____

7. How many years have you been working as a school psychologist following the completion of your internship (including the present year)?

8. In what state are you currently employed?

9. What best describes the schools that serve as your primary employment setting?
(Please check all that apply)
- A. Large City _____
 - B. Small City _____
 - C. Suburban _____
 - D. Rural _____
10. What is the student to school psychologist ratio of your assignment?

11. What is the age range of children/adolescents with whom you work primarily
(more than 50% of time)? (Check all that apply)
- A. 0-3 yrs old _____
 - B. 4-5 yrs old _____
 - C. 6-12 yrs old _____
 - D. 13-15 yrs old _____
 - E. 16-18 yrs old _____
 - F. 18 or older _____

II. Information on Employment

12. What is your employment status?
- A. Full-time _____
 - B. Part-time _____
13. What is the average number of hours you work in a week? _____
14. How many annual work days are included in your school contract? _____
15. What best describes your employment situation? (Check all that apply)
- A. School-Based (Public or Private School) _____
 - B. Public agency _____
 - C. Private not-for-profit organization _____
 - D. Private for-profit organization _____
 - E. Public/Private partnership (employed by public school and private organization) _____
 - F. Community Mental Health Center _____
 - G. Solo private practice _____
 - H. Group Practice _____
 - I. University faculty _____
 - J. Other (Please Specify): _____

16. In what service settings do you primarily work with students/families with mental health problems? (Check all that apply)
- A. Outpatient mental health clinic/center _____
 - B. Residential treatment center _____
 - C. Day treatment center _____
 - D. School-based program _____
 - E. School-based crisis services _____
 - F. Shelter _____
 - G. Psychiatric hospital _____
 - H. General/Community hospital _____
 - I. Physician's office/ Health clinic _____
 - J. Day care _____
 - K. Private Practice _____
 - L. Charter School _____
 - M. Other (Please Specify): _____
17. In your assignment, are there any special characteristics of children with whom you primarily work? (Check all that apply)
- A. Children with developmental disabilities _____
 - B. Children with learning disabilities _____
 - C. Children with behavior problems _____
 - D. Children with emotional problems _____
 - E. Children with social problems _____
 - F. Children who have experienced abuse/neglect _____
 - G. Other (Please Specify): _____

III. Information on Mental Health Services

18. Which of the following services do you provide to children/families with mental health problems? ***Place a check next to each service that you provide, then estimate the number of hours per week you spend providing service.***

<u>Service</u>	<u>Check if Provided</u>	<u>Hour Per Week</u>
A. Individual therapy/counseling	_____	_____
B. Family therapy/counseling	_____	_____
C. Group therapy/counseling	_____	_____
D. Substance abuse counseling	_____	_____
E. Early intervention services	_____	_____
F. Family/child advocacy	_____	_____
G. Behavior management consultation	_____	_____
H. Academic consultation	_____	_____
I. Assessment and diagnosis	_____	_____
J. Crisis intervention	_____	_____
K. Designing/administering individual service plans	_____	_____
L. Program development and administration	_____	_____
M. Personnel training (staff development)	_____	_____

- N. Vocational counseling _____
- O. Educational support _____
- P. Social skills training _____
- Q. Research and evaluation _____
- R. Other (Please Specify): _____

19. If you are involved in providing mental health services to children and families, to what extent do you feel that you are supported by school administration?
- A. No Support _____
 - B. Slight Support _____
 - C. Average Support _____
 - D. More than Average Support _____
 - E. Much Support _____
20. If you are involved in providing mental health services to children and families, to what extent do you feel that you are supported by department administration?
- A. No Support _____
 - B. Slight Support _____
 - C. Average Support _____
 - D. More than Average Support _____
 - E. Much Support _____
21. If you are involved in providing mental health services to children and families, to what extent do you feel that you are supported by staff?
- A. No Support _____
 - B. Slight Support _____
 - C. Average Support _____
 - D. More than Average Support _____
 - E. Much Support _____
22. What factors do you believe contribute to your success in the delivery of mental health services? (Please rank order)
- A. Training _____
 - B. School Psychologist/Student Ratio _____
 - C. Funding _____
 - D. Administrative support _____
 - E. School problem-solving team _____
 - F. Staff support _____
 - G. Teacher willingness/acceptance _____
 - H. Parental/family support _____
 - I. Access to/linkages with community resources _____
 - J. Other (Please Specify): _____
23. What factors do you believe contribute to positive student outcomes resulting from the mental health services you deliver? (Please rank order)
- A. Training _____

- B. School Psychologist/Student Ratio _____
- C. Funding _____
- D. Administrative support _____
- E. School problem-solving team _____
- F. Staff support _____
- G. Teacher willingness/acceptance _____
- H. Parental/family support _____
- I. Access to/linkages with community resources _____
- J. Other (Please Specify): _____

24. In which areas of mental health services would you like more training in? (Please choose and rank order three that are most important to your success)

- A. Prevention of emotional and behavioral problems _____
- B. Behavior management at home _____
- C. Behavior management in the classroom _____
- D. Individual therapy for children _____
- E. Life skills training _____
- F. Drug/alcohol treatment _____
- G. Medication _____
- H. Family therapy models _____
- I. Academic skills training _____
- J. Social skills training _____
- K. Teaching reading strategies _____
- L. Other (Please Specify): _____

25. What is the best venue to receive additional information on training in mental health service delivery? (Please rank order)

- A. NASP Publications _____
- B. NASP Websites _____
- C. APA Publications _____
- D. APA Websites _____
- E. In-service Trainings _____
- F. CEUs/ CPD units _____
- G. State or national conferences _____
- H. Other (Please Specify): _____

26. Would you as a school psychologist like to spend more time engaging in delivering school-based mental health services?

- A. Yes _____
- B. No _____

Please indicate why or why not?

27. What specific mental health services would you be interested in providing? (Please select as many items as you want and then rate each item you selected using the following scale: 1 = highest priority, 2 = moderate priority, 3 = lowest priority, 4= not needed)

- A. Individual therapy/counseling _____
- B. Family therapy/counseling _____
- C. Group therapy/counseling _____
- D. Substance abuse counseling _____
- E. Early intervention services _____
- F. Family/child advocacy _____
- G. Behavior management consultation _____
- H. Academic consultation _____
- I. Assessment and diagnosis _____
- J. Crisis intervention _____
- K. Designing/administering individual service plans (IEPs) _____
- L. Program development and administration _____
- M. Personnel training (staff development) _____
- N. Vocational counseling _____
- O. Educational support _____
- P. Social skills training _____
- Q. Research and evaluation _____
- R. Other (Please Specify): _____

28. What else do these researchers need to know about school psychologists providing mental health services to children?

**Please return the survey in the postage –paid envelope.
Thank you for your participation in this study!**

Appendix B

Consent Letter

Dear School Psychologist,

You are receiving this letter because your name was randomly selected from the National Association of School Psychologists' (NASP) database of "regular" members whose membership registration indicates that they are practicing school psychologists. The NASP Research Committee is conducting a study entitled "National Survey of School Psychologists' Mental Health Services." The information in this letter is provided to help you decide whether or not you want to take part in this research study. Please read this information carefully. If you do not understand anything, please contact the principal investigator (Kelly A. Powell-Smith, Ph.D., NASP Research Committee Chairperson).

General Information about the Research Study

The committee is asking you to complete a brief (10-15 minute) survey developed to acquire information about school psychologists and mental health services. Mental Health as defined by the Surgeon General is **"The successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and cope with adversity, from early childhood until late life. Mental health is the springboard of thinking and communication skills, learning, emotional growth, resilience, and self-esteem"** (2002). Mental health services are those services provided directly by a school psychologist, or in networking with others, at a district, building, classroom, or individual student level. These services are targeted at optimizing developmental skills or behaviors that increase the probability of school success.

The intent of this study is to develop a national database regarding the mental health services provided by school psychologists. This study is a follow-up to a previous study where school psychologists kept a log of mental health services. The results of that initial study stimulated several important questions related to the delivery of mental health services by school psychologists. For example, multiple issues exist regarding the mental health needs of students, (the numbers and types of mental health services delivered), the backgrounds of the school psychologists, and characteristics of the school setting. To address these issues, a national survey with a larger number of participants than the initial study is needed.

Plan of Study

The enclosed survey (both front and back) contains 28 items and should take no more than 10-15 minutes to complete. Please make sure that all items are completed before

submitting the survey. For your convenience, we have provided you with a postage-paid envelope to use in returning the survey to us.

Benefits of Being a Part of this Research Study

Ten participants who return completed surveys will be randomly selected to each receive \$50.00 NASP Bucks Certificates. Even though each participant will not receive direct personal benefits from this study, by participating in this study you may increase our overall knowledge of issues surrounding the provision of mental health services by school psychologists.

Confidentiality of Your Records

Your privacy and research records will be kept confidential to the extent of the law. Authorized research personnel, employees of the Department of Health and Human Services, and the USF Institutional Review Board may inspect the records from this research project. The results of this study may be published. However, the data obtained from you will be combined with data from others. The published results will not include your name or any other information that would personally identify you in any way.

Volunteering to Be Part of this Research Study

Your decision to participate in this research study is completely voluntary. You are free to participate in this research study or to withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive, if you stop taking part in the study. If you have any questions about this research study, contact Dr. Kelly A. Powell-Smith, NASP Research Committee chairperson at (813) 974-9698 or at kpsmith@tempest.coedu.usf.edu.

Thank you very much for your participation.

Kelly A. Powell-Smith, Ph.D.
Research Committee Chairperson, National Association of School Psychologists
Associate Professor of School Psychology, University of South Florida
4202 East Fowler Ave, EDU 162, Tampa, Florida 33620
(813) 974-9698 (telephone) or (813) 974-5814 (fax)
kpsmith@tempest.coedu.usf.edu