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Evaluating the effectiveness and utilization of school-based mental health programs

Submitted by Holly Kline
May 11, 2012

MSW Clinical Research Paper

The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University/University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month time frame to demonstrate facility with basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the university Institutional Review Board, implement the project, and publicly present their findings. This project is neither a Master's thesis nor a dissertation.

School of Social Work
St. Catherine University & University of St. Thomas
St. Paul, Minnesota

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Abstract

The need for school-based mental health services has increased in the past decade, but little is known about the effectiveness and utilization of school-based mental health services. This research will focus on the reported effectiveness and utilization of school-based mental health services in Minnesota. This research focuses on surveying a total of 150 schools, including elementary, middle, and high schools in Minnesota. The survey consisted of quantitative and qualitative questions, as developed by the researcher. The targeted respondents were school social workers school psychologists. Integration of education and mental health services in schools continues to grow rapidly. This research also focuses on the need for school-based mental health services and the benefits of having a school-based mental health program in the school.

The results suggest that school-based mental health services are beneficial to students and are utilized when possible by the student. The most commonly used interventions is social skills training, solution-focused therapy, and group work, as reported to the researcher.

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Table of Contents

| | |
|---|----|
| Abstract | 2 |
| Acknowledgment | 3 |
| Introduction | 6 |
| Literature Review | 8 |
| Why School-Based Mental Health Services | 8 |
| History of School-Based Mental Health Services | 11 |
| Utilization of School-Based Mental Health Services | 13 |
| Effectiveness of School-Based Mental Health Services | 16 |
| Needs Assessment of School-Based Mental Health | 23 |
| Current Research | 24 |
| Conceptual Framework | 28 |
| Ecological Model Applied in Public Schools | 28 |
| Positive Behavior Intervention and Supports (PBIS) | 29 |
| Socio-Technical Model of Organizational Effectiveness | 30 |
| Methods | 32 |
| Research Question | 32 |
| Sample | 32 |
| Research Design | 34 |
| Measurement | 34 |
| Results | 35 |
| Discussion | 43 |
| Implications for Social Work Practice | 46 |
| Social Work Education and Policy | 47 |
| Future Research | 48 |
| Conclusion | 50 |
| References | 52 |
| Appendix A Informed Consent | 55 |
| Appendix B Survey | 57 |

List of Tables and Figures

| | | |
|-----------|--|----|
| Table 1. | Participants' Characteristics | 60 |
| Table 2. | Effectiveness of School-Based Mental Health Programs | 61 |
| Table 3. | Utilization of School-Based Mental Health Programs | 62 |
| Figure 1. | School Locations by County | 63 |
| Figure 2. | Participants' Current Licensure | 64 |

Introduction

School-based mental health services refer to any mental health service delivered within a school setting, which can include neighborhood schools, school-administered programs in hospitals, and special education programs (Whitman et al., 2008).

One in five children and adolescents have emotional or behavioral problems significant to warrant a mental health diagnosis, according to the 1999 Surgeon General's Report on Mental Health and the 2000 Report of the Surgeon General's Conference on Children's Mental Health, (Brenner et al., 2007). Because emotional, behavioral, and psychosocial problems can disrupt function at home, in school, and in the community, mental health has become an important health concern (Brenner et al., 2007).

Because more than 97 percent of five-to-17-year olds are enrolled in school, schools are in a unique position not only to identify mental health problems, but also to provide links to appropriate services (Brenner et al, 2006). Schools are a natural setting for mental health services since children and adolescents spend a large portion of their time there.

In 2004, the American Academy of Pediatrics (AAP) issued a policy statement on school-based mental health services that outlined the advantages of basing mental health services at school and provided recommendations to help health care professionals, educators, and mental health specialists work together to develop and implement effective school-based mental health services (Brenner et al., 2007).

Social workers struggle with methods that are effective when working with students in the school setting. Factors that contribute to this struggle are that the need outweighs the availability of such practitioners and the amount of time that is allowed.

Cognitive Behavioral Therapy (CBT) is believed to be an effective method of helping children in the school setting due to the brief nature of therapy and that it allows students to help focus on the issues that are currently occurring as well as gives the student a goal to work toward. A positive aspect of having school-based mental health services is that school-based clinicians have many more resources of information readily available to them than clinic-based practitioners. School-based clinicians also can regularly observe the interpersonal relationships of the student.

The purpose of this research is to further explore the effectiveness and utilization of school-based mental health services within schools in the state of Minnesota. Schools from different settings will be examined, such as schools that are located in rural areas as well as those located in suburban areas. This research also aims to examine the use of school-based mental health services in all grade levels, kindergarten to 12th grade.

Literature Review

Why School-Based Mental Health?

Why do schools have any mental health related programs? There are legal mandates requiring mental health services for some students diagnosed with special education needs. In addition, school administrators, board members, teachers, parents, and students have long recognized that social, emotional, and physical health problems and other major barriers to learning must be addressed so that schools function satisfactorily and students learn and perform effectively (Adelman & Taylor, 1999). Brenner and colleagues (2007) stated that one in five children and adolescents have emotional or behavioral problems significant to warrant a mental health diagnosis. Because emotional, behavioral, and psychosocial problems can disrupt function at home, in school, and in the community, mental health has become an important health concern (Brenner et al., 2007). Federal and state education directives have overridden the concerns of educators and are forcing schools into the human service direction (Kury & Kury, 2006). One means of addressing these directives is for school to form collaborative partnerships with community health care agencies to develop school-based health centers offering both health care and mental health services (Kury & Kury, 2006).

There is an abundance of evidence that most children in need of mental health services do not receive them, and those that do, receive them, for the most part through the school system (Kutash et al., 2006). Schools have a long history of providing mental health and support services to children and provide convenient access for most children (Kutash et al., 2006).

School-based mental health services refer to any mental health service delivered within a school setting, which can include neighborhood schools, school-administered programs in hospitals, and special education programs (Whitman et al., 2008). Also, the term “school-based mental health” has become a commonly used phrase. The term has generally come to be understood as “any mental health service delivered in a school setting” (Kutash et al., 2006).

The value of providing mental health services in schools was first recognized in this county at the turn of the century in Chicago, Illinois. In 1930, the Pennsylvania State Department of Education developed the model for certification of school psychologists for the primary purpose of designating pupils as candidates for special education. And, from the 1950s through the 1970s, school-based psychological services focused largely on assessments of children for special services. During the 1970s, school mental health services began to be viewed much more broadly to include a range of interventions provided directly and indirectly through the schools (Hoagwood & Erwin, 1997). In 2009, there were 275,800 school counselors in public schools (National Center on Education Statistics, 2009). While 20 years ago, most counselors were in the high schools, they are now in middle schools and increasingly in elementary schools (U.S. Department of Labor, 1994).

The integration of education and mental health services in schools have evolved over the past several years. School-based mental health programs have many benefits, including greater access and improved effectiveness as compared to clinic or hospital-based services. Proponents of school-based mental health services argue that schools are the ideal location for a wide range of treatment services (Evans, 1999). Some may argue

that schools are ideal because schools are second only to families in shaping children's development and, therefore, make an ideal treatment setting (Evans, 1999). One advantage of the familiar setting of school for mental health services is that students and families avoid the stigma and intimidation they may feel when they go to an unfamiliar and perhaps less culturally compatible mental health settings (Committee on School Health, 2004). In addition to eliminating barriers to access to care, school-based mental health services offer the potential to improve accuracy of diagnosis as well as assessment process (Committee on School Health, 2004).

Kutash and colleagues (2006) reported that the first public law was passed addressing the education of students with disabilities, the Education of All Handicapped Children Act, which was later reauthorized as the Individuals with Disabilities Education Act (IDEA). This act placed a larger responsibility on the education system to meet the mental health needs of students with emotional disturbances. This legislation also required all support services needed to help educate students with disabilities must ultimately be supplied by the education system (Kutash et al., 2006). In response to the gap between mental health problems and services, the President's New Freedom Commission on Mental Health was created in 2002 to study mental health service delivery system. In their final report, the Commission recognized the important role that schools can play in meeting the mental health needs of children and adolescents (New Freedom Commission on Mental Health, 2002). Schools are in a unique position not only to identify mental health problems, but also to provide links to appropriate services (Brenner, et. al, 2006). Schools are a natural setting for mental health services since children and adolescents spend a large portion of their time there. Hoagwood & Erwin

(1997) also contend that schools are the primary providers of mental health services for children because they are required to attend school.

History of School-Based Mental Health Services

School-based mental health programs and services have grown progressively in the United States in the past two decades, related in part to increased recognition of their advantages and heightened federal support (Paternite, 2005). The rapid growth of school-based mental health programs and services in the United States has been facilitated by important federal initiatives. Specifically, reports of the U.S. Surgeon General, on mental health and children's mental health, both highlighted the youth mental health crisis and the importance of school-based approaches in improved mental health care (Paternite, 2005).

The current movement toward channeling mental health resources into school is reminiscent of the inception of child mental health services in the United States (Kutash, et al., 2006). At the end of the 1800s, the first child mental health services began by providing counseling to children with school problems, which was in response to an increasing number of children being placed in adult jails (Kutash et al., 2006). 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). Along with juvenile court clinics that incorporated the first multi-disciplinary teams to work with children, gave rise to advocacy for building child guidance clinics throughout the country in 1922 (Kutash et al., 2006). The initial clinics were primarily staffed by social workers and later evolved to include multi-disciplinary teams that encouraged community-based, and non-hospital based, care for children, with many created to work specifically with school districts.

These early clinics provided the foundation for currently operating community mental health centers throughout the country (Pumariega & Vance, 1999).

In the late 1970s, there were many health professionals who thought that the school was not a proper setting for mental health services (Tyack, 1992). In the 1980s, the Reagan administration brought budget cuts in human services that directly affected Maternal and Child Health Services which may have reduced funding to school health programs (Tyack, 1992). Despite funding cuts in the schools, in 1987 there were 178 school-based clinics operating in junior and senior high schools in 32 states. In addition to the basic health services like immunizations and treatment for common ailments, mental health services were also offered (Tyack, 1992). In 1991, the California legislature passed the Healthy Start Support Services for Children Act. This important piece of legislation established innovative, comprehensive, school-based services, social and academic support services throughout the state. In order to be eligible for Healthy Start grants, a school must demonstrate that many of the families and participants are eligible for Medi-Cal and Temporary Need to Needy Families (TANF), have limited English proficiency, and are eligible for subsidized school lunch programs. This initiative is designed to offer comprehensive services to the student and his/her family (Tyack, 1992).

It is clear that both the education and mental health systems have a long history of providing mental health services to students. Sometimes these services are delivered collaboratively between the two systems, but more often, the services work parallel to one another. Efforts to conceptualize school-based mental health services will be advanced by including a clear delineation of the role of each system (Kutash et al., 2006).

Utilization of School-Based Mental Health Services

In advocating partnerships with schools to address the mental health needs of youth, it is important to emphasize that schools cannot, and should not, be held responsible for meeting every need of every student (Paternite, 2005).

Adolescents with mental health problems have been identified as an underserved population, in large part due to their resistance to seek treatment for their problems (Evans, 1999). It is estimated that a third or less of the adolescents in need of mental health services actually received them (Stiffman et al., 1988). For the small percentage of youth who do receive service, most actually received it within a school setting (Paternite, 2005). One of the goals of developing comprehensive mental health services in schools is to improve the likelihood that children and adolescents who need services will actually receive them. According to a study completed by Anglin, Naylor, and Kaplan (1996), they examined the utilization rates of three high school comprehensive health-care centers in Denver, Colorado. The authors found that students utilized school-based mental health services at a rate greater than the national figures for utilization of hospital and clinic-based services. Another survey was completed by 471 seniors in a Los Angeles high school about the mental health services that were available in the school's health clinic (Adelman et al, 1993). The most frequent reason for not using the clinic was the adolescents reported that they did not need help. Two other important reasons for not using the services were concerns related to confidentiality and a perception that the clinic staff would not be helpful (Adelman et. al, 1993). Similar findings about perceived obstacles to care reported by Evans et al. (1996), who surveyed 29 parents of children receiving treatment in various school-based programs and 29

parents of children receiving treatment in a traditional outpatient clinic. Thirty-one percent of the parents of children in clinic-based treatment and 50 percent of the parents of children in school-based treatment reported that transportation was a significant problem in obtaining care in a clinic. Therefore, reducing barriers related to transportation may be a key factor in enhancing utilization in school, as compared to clinic-based programs (Evans, 1999).

In the largest study of children's mental health service use and psychopathology, of the 16 percent of children or adolescents receiving any mental health service, less than 25 percent received them through the general medical care sector, whereas 75 percent received them within the schools (Hoagwood & Erwin, 1997). Current estimates of the percentage of children with severe emotional disturbance range from nine to 13 percent (Hoagwood & Erwin, 1997). At the same time, the number of school counselors has increased. In 1995, there were 82,954 school counselors in public schools and the numbers are expected to increase. Twenty years ago, most counselors were in the high schools, but they are now in middle schools and increasingly in elementary schools (Hoagwood & Erwin, 1997).

Overall, studies suggest that, in spite of concerns about confidentiality and the quality of care by parents and adolescents, youth utilize school-based mental health services at a higher rate than traditional clinic- and hospital-based services (Evans, 1999). It could be that convenience is the most compelling factor for increased utilization. Further investigation is needed to verify these reports of increased utilization and to determine if there are procedures that can be used to reassure parents about confidentiality and quality of care in school-based programs.

Despite the guidelines and standards, there is no one “best practice” model for school-based mental health programs. Instead, most school districts offer a range of programs and services oriented to student needs and problems (Brener et. al, 2007). School counselors, school psychologists, clinical and counseling psychiatrists can each contribute to varying degrees in school mental health cases (Kury & Kury, 2006).

School-based clinics are also a means to access some populations that under-utilize service in the community. The Latino community is an example of an underrepresented population in community based mental health services. School-based mental health services offers a compelling alternative to traditional clinic-based mental health services to meet the mental health needs of the Latino children in the context of their family, school, and the community (Garrison et al., 1999). School-based health services have the potential for bridging the gap between need and utilization by reaching disadvantaged children who would otherwise not have access to these services (Armbruster & Lichtman, 1999). School-based programs, when appropriately designed, can also overcome various barriers faced by Latino families such as limited finances, lack of health insurance, and language (Garrison et al., 1999).

Over the last decade, there has been a rapid proliferation of school-based health centers. Rising from about 10 in 1984, there are currently at least 500 throughout the United States, primarily in high schools (Adelman, 1995). In addressing nonmedical problems, the initial response at school-based health centers was to hire a part-time mental health professional who offered individual or group psychological intervention to some and provided referrals to others. Not surprisingly, the demand for psychological treatment quickly outstripped the resources available (Adelman, 1995). In a study by

Weist and colleagues (2002), there were more than 300 people (including educators) who indicated a strong endorsement of principles involved with school-based mental health services. A few key principles are as follows: (a) All youth and families are able to access care, regardless of their ability to pay, (b) Quality assessment and improvement activities guide the program, (c) A continuum of care is provided, including mental health promotion, early intervention, and treatment, and (d) Mental health programs in the school are coordinated together and with related programs in other community settings.

Evidence is growing that school-based mental health programs are indeed helping student and schools to achieve desired outcomes. However, much work remains to be done in the interconnected themes of building advocacy, improving funding, increasing capacity, enhancing quality, and using and expanding the evidence base (Weist et al., 2002). As this work advances, educators, health and mental health staff will need to increase their collaboration in efforts that informed and guided by students, families, and community members (Weist et al., 2002).

Effectiveness of School-Based Mental Health Services

While conducting a literature review of school-based mental health programs, little was discovered in terms of evaluation and effectiveness of the program because the programs are new and there has been little opportunity to long-term study to be done (Flaherty et al, 1996). In the following, what information is known will be shared.

Whitman and colleagues (2008) state that there is ample evidence that demonstrates the effectiveness of school-based mental health services. In elementary schools, such programs have been shown to reduce inappropriate referrals into special education. Schools that provide school-based mental health services overwhelmingly

report fewer course failures and higher grade point averages compared with before the programs were implemented (Bruns et al., 2004). An ideal setting for addressing mental health with public health strategies is the school (Whitman et al., 2008). A systemic review of literature on health promoting schools found that mental health is most effectively promoted through a whole school approach (Whitman et al., 2008). The World Health Organization has defined a health promoting school as a school that constantly strengthens its capacity as a healthy setting for living, learning and working which fosters health and learning with all measures at its disposal (2008).

Early data indicate that Expanded School Mental Health (ESMH) programs are, in fact, associated with improved learning and behavioral outcomes for schools and for students. School-based health care, including mental health care is receiving significant support from organized advocacy at local and state levels (Weist et al, 2002). However, although the suggestion that thousands more children and adolescents may be accessing needed mental health services is encouraging, it is also understood that the effectiveness of most school-based interventions has not been well documented. School systems also have a major stake in assessing the effectiveness of these services (Bruns et al., 2004).

However, Durlak (1997), in a meta-analysis of various school-based prevention programs, did report that programs were more effective when delivered in schools versus other sites. Also, preliminary reports are supporting the effectiveness of school-based mental health programs.

One of the major deficiencies in the current knowledge of mental health care for children and adolescents relates to generalization (Evans, 1999). It is in the area of generalization that school-based mental health services should have advantages over

clinic-based care. Clinicians in schools have easy access to teachers, readily observe social interaction, can manipulate important contingencies, and can verify facts pertaining to the student. School-based clinicians have many more resources of information readily available to them than clinic-based practitioners. School-based clinicians also can regularly observe the interpersonal relationships of the student. Stokes and Baer (1977) defined generalization as the occurrence of relevant behavior under different, non-training conditions (i.e, across subjects, settings, people, behaviors, and/or time) without the scheduling of the same events in those conditions as had been scheduled in the training conditions.

There is growing literature supporting the correlations between a positive learning environment, social-emotional competencies, avoidance of risky behaviors, mental health and academic success have led to strong endorsement for the expansion of school mental health services (Walter et al., 2011). Also found by Walter and colleagues (2011), after one year of intervention, students had significantly fewer mental health difficulties, less functional impairment, improved behavior, and reported improved mental health knowledge. Teachers reported significantly greater proficiency in managing mental health problems and staff overall endorsed satisfaction with the program. Weist and colleagues (2002) also confirm that there is extensive literature about school-based interventions that help lead to positive outcomes for students. However, further explains that assistance and resources to apply evidence-based research in schools are lacking and that without linking resources, the actual implementation of evidence-based programs in the schools will continue to be extremely limited.

A study conducted in urban New Haven, Connecticut among students from low-income, Medicare-eligible families in 36 inner-city schools showed significant improvement in Global Assessment of Functioning (GAF) scores from the first session to the time of discharge (Armbruster & Lichtman, 1999). Furthermore, this study concluded that school-based interventions were as or more effective as those provided in a community mental health clinic (Armbruster & Lichtman, 1999).

The application of behavioral and cognitive-behavioral techniques to the social, behavioral, and emotional problems of children in schools has been well documented (Hoagwood & Erwin, 1997). These techniques have been empirically validated with a range of “problem” behaviors from impulsivity and inattention to academic performance training (Hoagwood & Erwin, 1997). Kavanagh and colleagues (2009) conducted a systematic review of mental health promotion interventions based on cognitive behavioral therapy (CBT) delivered in schools to young people ages 11-19. They found that CBT may be more effective for young people from families with middle to high socioeconomic status (SES) than for those from low SES backgrounds (Kavanagh et al., 2009). Many existing interventions have been underpinned with approaches based on CBT techniques, providing young people with problem solving skills, social and coping skills and techniques to develop a rational and optimistic thinking style (Kavanagh et al., 2009). However, none of these specifically considered CBT based interventions, or their potential impact on mental health inequalities, which this study focused on. Thus, there is a need to assess whether CBT based interventions in school are effective and whether they can reduce inequalities in young people’s mental health (Kavanagh et al., 2009). CBT programs aimed to prevent the development of depressive symptoms and suicidal

behaviors among youth have resulted in varying levels of success (Roanes & Hoagwood, 2000). Roanes and Hoagwood (2000) found that through program evaluation using both a matched-comparison school and a single-school multiple baseline method, three years after the initiation of Project ACHIEVE there were significant decreases in special education referral (75 percent), disciplinary referral (28 percent), and grade retention (90 percent). Project ACHIEVE is a school reform process designed to reduce the risk of educational and social failure among at-risk and underachieving students (Roanes & Hoagwood, 2000). Results suggest that a school-wide approach can reduce child discipline problems and promote student achievement (Roanes & Hoagwood, 2000). This study conducted by Roanes & Hoagwood (2000) show that the student referrals to the program were made based on grade-wide assessments using teacher, peer, and self-report. Children were randomly assigned to either school-based counseling or academic tutoring. A matched group of children from comparison schools was referred to local community mental health centers for services. In the first six months of program implementation, 98 percent of children referred to the school-based counseling program entered services whereas 17 percent of children referred to community mental health centers entered treatment. This finding suggests that service accessibility and use were significantly increased by the presence of school-based counseling services. Whitman et al (2008) also believe that a health promoting school unites policy, skills-based health education, a healthy physical and psychosocial school environment, and access to services to provide a comprehensive approach. There is considerable emphasis on engaging health, mental health and education officials, students, parents, and community

leaders in planning and designing the policies and interventions to make the school a healthy place (Whitman et al., 2008).

The efficacy of CBT and art therapy in modifying locus of control and adaptive classroom behavior of children with behavior problems was studied. Thirty-six students in grades four, five, and six with moderate to severe behavior problems, were randomly assigned to one of three conditions: cognitive behavioral therapy; art as therapy; and a control group. Results showed that neither treatment was more effective than the control group in changing locus of control perceptions. Significant effects were found for both treatment conditions in terms of increasing adaptive behaviors skills as measured by the Conners Teacher Rating Scale (Hoagwood & Erwin, 1997). Another study showed that one hundred and fifty adolescents at risk for future depressive disorders were randomly assigned to either a 15-session cognitive group prevention intervention or a control condition. Results showed a significant 12-month advantage for the prevention program, with affective disorder incidence rates of 14.5 percent for the active intervention and 25.7 percent for the control condition (Hoagwood & Erwin, 1997).

Dallas Texas Public Schools established the first school-based mental health center in the United States in 1969 (Jennings et al., 2000). In Dallas, Texas, among students receiving mental health services, there was a 32 percent decrease in absences, a 31 percent decrease in failures, and a 95 percent decrease in disciplinary referrals (Jennings et al., 2000). Satisfaction questionnaires that were completed by students and family members who were receiving mental health services were positive, with more than a 90 percent satisfaction rating and 95 percent satisfaction rating from school personnel (Jennings et al., 2000).

With the exception of outpatient psychotherapy, the effectiveness of most mental health services has not been demonstrated. In a recent review of all studies since 1988 that examined either efficacy of clinical treatments or effectiveness of services, only 38 met minimal scientific criteria (Hoagwood & Erwin, 1997).

Policy changes at national and state levels are placing more pressure on schools to provide services of all kinds to children. Consequently, questions about the effectiveness of these services are being asked more frequently (Hoagwood & Erwin, 1997). A review of the evidence for the effectiveness of specific types of school-based mental health services can be helpful in informing such policy changes.

Results from a study of 201 students in 15 urban schools in Ohio showed that providing early mental health assessment and intervention for students with significant mental health need helps reduce mental health symptoms (Hussey & Guo, 2003). The study indicated over 66 percent of the students initially met the cut score for externalized disorders such as conduct disorder or oppositional defiant disorder, and 56 percent of students initially met the cut score for internalized disorders such as depression, at the pre-test analysis. Students were provided SBMH treatment over the course of the school year utilizing an innovative program titled Beech Brook School-Based Community Support Program (SBCSP). SBCSP enhances student social behavior using individual and group therapy, case management, and family participation. Post-test analysis showed a reduction of both types of disorders following the treatment period. The authors reported limitations of the study were a lack of randomization of students and no control group.

Needs Assessment of School-based Mental Health

Kolbe (2005) noted that the most common cause of death, disability, injury, and illness among young adults results from patterns of behavior that become established in school-age years. Such preventable behaviors are weighing on our healthcare, health insurance and underlying economic systems to the point of detriment. The Center for Mental Health in Schools at UCLA (2005) estimates that 12-22 percent of all youths younger than age 18 have mental health service needs. An additional number of studies exist that indicate the overwhelming need of mental health services for children (Chandra & Minkovitz, 2007; Farmer et al., 2001). In a study by Chandra & Minkovitz in 2007, of the number of eighth grade students in a mid-Atlantic community, nearly 90 percent of the participants relayed a personal experience with a mental health issue that had influenced their attitudes towards confronting a mental health problem (Chandra & Minkovitz, 2007). In 1999, the United States Department of Health and Human Services estimated that in a given year, approximately ten percent of children and adults receive mental health services in the health sector. Another 20 percent of children receive services from outside sources such as the school or social service agencies (Nastasi et al., 2004). Epidemiological research continues to indicate a high prevalence of psychiatric disorders among children and adolescents (Masia-Warner et al., 2006). Although there is a great need for children's mental health services, few children actually receive mental health treatment. According to the Surgeon General's report, six to nine million youngsters with emotional problems are not receiving the help that they require. Of the families who do receive services, 40-60 percent terminates services prematurely (U.S. Department of Health and Human Services, 2000). Twenty-three Schools play a vital

role in the lives of youth as nearly 50 million children and adolescents attend public school in the United States (National Center for Educational Statistics, 2005). Children's need of emotional, social, and behavioral assistance in order to perform better academically is a fact that is becoming more recognized by the education world (Vanderbleek, 2004). Schools present a unique access point in providing and identifying mental health issues in youth (Masia-Warner et al., 2006). Through school environments, the majority of youth in need can have access to needed services. Such accessibility provides for an environment of prevention, identification, and intervention efforts for youth that can prevent more serious issues as adults (Kolbe, 2005). In addition, research notes that psychiatric issues in children and adolescents are often not recognized or are minimized by adults (Clauss-Ehlers & Weist, 2002). By working through a collaboration of mental health and education, more opportunities are created to educate and support parents, educators, and children about the aspects of mental health referrals and treatment (Masia-Warner et al., 2006).

Current Research

In 2003, the report from President Bush's New Freedom Commission on Mental Health (NGCMH) provided impetus for those invested in children's mental health to consider how best to improve the current system of care (Weist et al, 2004). The Commission recognized the importance of providing a full continuum of services to children and families directly in communities. The report also included a recommendation to improve and expand school mental health programs. It should come as no surprise that schools nationally are the major providers of mental health services for children (Rones & Hoagwood, 2000). Although only 16 percent of all children receive

mental health services, 70 to 80 percent of these children receive that care in the school setting (The Center for Health and Health Care in Schools, 2007). Schools provide a setting for the early identification of emotional and behavioral problems and provision of services due to the critical, daily role they play in the growth and development of children. Furthermore, services offered in the school environment are more convenient to children and families and therefore are far more likely to be utilized than many services in the community.

Although schools are not the primary agency responsible for addressing emotional and behavioral issues, the Individuals with Disabilities in Education Act (IDEA) requires that schools follow specific procedures to meet the educational needs of children with disabilities. The reauthorization of the IDEA in 2004 has improved the landscape of education for children with mental health needs. The introduction of evidence-based practices fulfills the goals set forth in IDEA in serving children both with and without disabilities. In light of these developments, the provision of mental health services in schools continues to evolve and demands collaborative efforts from both educational and mental health professionals. There are apparent organizational and political realities impacting the provision of evidence-based mental health services in the school setting. Several pieces of legislation, as well as a report commissioned by President George W. Bush, helped to improve mental health service delivery to children in schools. Public Law 94-142, the Education for All Handicapped Children Act of 1975, was the original legislation requiring schools to open their doors to all children with disabilities. Serious emotional disturbance (SED) was one of the original categories of children to be served by school personnel as a result of the years-long battle to pass legislation. Re-

authorizations of this Act over the next 30 years, most notably in 1997 and 2004, expanded protections and services. One added provision was that a child was not required to have an SED to obtain mental health counseling in order to assist with their disability. Another addition was the provision of counseling for parents designed to assist in the understanding and assisting with services for their child's disability. Additionally, Section 504 of the Rehabilitation Act of 1973 guaranteed accommodations to ensure access to major life activities for individuals with disability, or for those who were suffering the effects of a disability. President Bush's re-authorization in 2002 of the Elementary and Secondary Education Act of 1965, more popularly known as the No Child Left Behind Act (NCLB), allowed schools to expand services to address the mental health needs of children not requiring special education services. In 2003, the President's New Freedom Commission on Mental Health punctuated many of the original observations and recommendations made in the Surgeon General's 1999 report on mental health services in the United States. In 2005, the report on School Mental Health Services in the United States, 2002-2003 provided the first nationwide baseline data regarding mental health services in schools. Data provided the following overview: 1.) Virtually all schools reported having at least one staff member whose responsibilities included providing mental health services to students; 2.) 87 percent of schools reported that all students, not just those served in special education, were eligible to receive mental health services; 3.) Over 80 percent of schools provided assessment for mental health problems, behavior management consultation, and crisis intervention, as well as referrals to specialized programs. A majority provided counseling and case management; 4.) 49 percent of school divisions used contractual arrangements with community-based

organizations to provide mental health services to students; and 5.) 60 percent of school divisions reported that referrals to community-based providers had increased over the previous year. Unfortunately, one-third of school divisions reported the availability of outside providers to deliver services to students decreased.

Conceptual Framework

Ecological Model Applied in Public Schools

Ecological theory directs the focus on prevention and intervention efforts within the schools and their primary worker, whether it is a school social worker or school psychologist (Cappella et al., 2008). Cappella and colleagues propose that an ecological model informed by public health and organizational theories to refocus school-based mental health services in high poverty communities on the core function of schools to promote learning (2008). This model emphasizes the natural contexts in which children live, the embedded and interacting nature of these contexts, and the importance of these contexts in influencing children's growth and development (Cappella et al., 2008). Ecological theory also guides the emphasis on mental health support of school programs and methods, and integration of mental health services within the natural space of children's school experiences (Cappella et al., 2008). Existing programs that have evidence of effectiveness in some settings may be useful with the accompanying modifications reflective of ecological, public health, and organizational principles (Cappella et al., 2008). The ecological model provides a useful framework for the Positive Behavior Intervention and Supports (PBIS), as well as for more general selection of mental health activities in a school building (Cappella et al., 2008). According to Cappella and colleagues, prevention is the first priority to help children succeed; academic progress is targeted and monitored; and provides a base for collaboration.

The ecological model would be included under the Theory of Human Behavior and one of the focuses of this theory is to look at how persons interact with their environment. This theory will help explain the relationship between the independent and

dependent variable by looking at how the school is or is not effective in providing school-based mental health services. If a school is able to effectively, as reported by the school social worker or school psychologist, provide mental health services to its students, then it could be viewed as a positive relationship between the student and their environment. Therefore, this theory would be relevant to the current study.

Positive Behavior Intervention and Supports (PBIS)

School-wide positive behavioral support is a set of evidence-based strategies at the individual and system levels that schools implement as a means toward improving student behavior and learning (Cappella et al., 2008). Cappella and colleagues (2008) conclude that outcome data in urban schools is not yet available, from an ecological, public health perspective, PBIS has several advantages. It focuses on supporting settings such as classrooms, hallways, and lunchrooms, it is implemented mainly by school personnel, and it integrates interventions across three tiers-universal, targeted, and intensive. At the universal level, a mental health provider such as a school social worker can support implementation of school-wide programs in the lunchroom, hallways, or playground and provide training and supervision to lunchroom aides or playground monitors. At the targeted level, a school social worker can collaborate with school administrators or paraprofessionals to gather data and intervene in classrooms that may have a high need of mental health services. And, at the intensive level, a community mental health provider linked with a school can provide direct services as well as find additional resources for students with more chronic academic and behavioral needs.

Socio-Technical Model of Organizational Effectiveness

The socio-technical model of organizational effectiveness is the assumption that “core technology” of the school to promote learning is embedded within the social context of the school (Cappella et al., 2008). This model derived from the socio-technical design founded in 1946 by the Tavistock Institute of Human Relations in London (Mumford, 2006). Socio-technical model also guides the discussion of specific ways in which mental health can support the development of classroom and school contexts to promote school goals (Cappella et al., 2008). The adoption of evidence-based practices, fidelity to practice protocols, service relationships, and service availability, responsiveness and continuity are as much social processes as technical processes, are embedded in organizational social context and are affected by the organizational social context (Cappella et al., 2008). According to Mumford (2006), socio-technical design is over 50 years old and describes a process and a humanistic set of principles that our context is associated with technology and change. It is a way to bring together the psychological and social sciences that benefited society (Mumford, 2006). If the current environment is firm, it will include the surrounding departments and all other activities that enable the school to run effectively (Mumford, 2006).

This model would be useful in exploring the relationship between collaborative efforts by mental health and school personnel to promote student learning. Although the link between mental health and academic achievement is not new, the focus has been primarily on outputs and not inputs: the impact of mental health services on achievement rather than mental health activities that are oriented towards learning (Cappella et al.,

2008). Numerous studies suggest that focusing on academic interventions can improve children's social and emotional functioning (Cappella et al., 2008).

Methods

Research Question

This present study will examine if school-based mental health services are effective and if the services are effectively utilized in randomly selected elementary, middle, and high schools in Minnesota. Also, this study will look at effective treatment methods used in school-based mental health settings, as reported by school social workers and psychologists. Both qualitative and quantitative methods were used to conduct the research, as developed by the researcher.

It is hypothesized that if school-based mental health services are offered and utilized, it can reduce inequalities in young people's mental health. Sub-questions to be studied is if school-based mental health programs improve a student's learning, does therapy decrease risky behavior, benefits and challenges of school-based mental health programs. This present study will look at the following questions: First, if school-based mental health service is offered, does the student's mental health improve? Second, if school-based mental health services are offered, what type of therapy or intervention is used the most? Third, if school-based mental health services are offered, what are the benefits? Fourth, if school-based mental health services are offered, what are some of the challenges? And, fifth if school-based mental health services are offered, how many students utilize services?

Sample

The current study conducted a survey using availability sampling of school social workers and psychologists in public schools in Minnesota. The main focus will be 50 elementary schools, 50 middle schools, and 50 high schools to total 150 schools in

Minnesota. The survey will ask the school social worker or school psychologist to answer questions regarding, but not limited to, mental health services provided in their school, if any; treatment methods used in the school setting; approximately how many students they see per school year; and the overall effectiveness of their school-based mental health services.

The most appropriate way to reach this population is to look on the Internet for a list of elementary, middle, and high schools in Minnesota, obtain the school social worker or school psychologist's name, and send out a survey to the school to either the school social worker or psychologist via e-mail. This will be obtained through the schools online staff directory. The survey will be sent electronically, using an online survey tool.

There are several limitations to the study. The first limitation to the sampling will be that the data analyzed will be dependent upon the number of surveys that are completed and returned to me. E-mail surveys in general, yield a lower response rate. Another limitation to the sampling will be to correctly differentiate between a rural and urban school setting. A third limitation would be if all schools that are sent the survey have a school-based mental health program, or if only some have such a program. Time will also be a limitation to the study, as the participants will have about 15 days to complete the survey and return it. Since the sample size will be 150 public schools, this will be used to generalize for the schools of Minnesota, and not specific to one school district or type of school (e.g. rural, urban, elementary school, etc.). So, it will be imperative that the participants complete and return the survey as quickly as possible. The surveys will be tracked anonymously as to how many surveys are sent electronically by the researcher.

Research Design

For the purpose of this study, a cross sectional research design will be used, using both qualitative and quantitative methods. This method was chosen due to the amount of limited time for the research study and it will be used for educational purposes. The survey will be administered by sending the survey electronically, if an e-mail address is provided in the staff directory. All surveys will be sent electronically due to the limited amount of time to conduct the research. The research questions used will be from a survey that is comprised of questions that the researcher has developed, as no specific survey was found with the specific questions regarding effectiveness and utilization of school-based mental health services. The survey will consist of both qualitative and quantitative methods.

Measurement

The dependent variable is the effectiveness and utilization of school-based mental health services, as reported by a school social worker or school psychologist, using both qualitative and quantitative methods. The scale that will be used to measure will be questions the researcher has come up with. The survey will consist of qualitative and quantitative methods, questions regarding their educational level, school setting (public, rural, etc.), types of therapy provided, and their perception on utilization and effectiveness of school-based mental health programs, if applicable. The three main components of the survey will revolve around the therapy or intervention used most frequently, effectiveness and utilization of school-based mental health services, and demographics such as ages of students, location of school and other factors.

Results

The following tests will be used to determine the relationship of effectiveness and utilization of school-based mental health services and effective treatment methods used in the school setting using SPSS with frequency and descriptive analyses.

Participants' Characteristics

One hundred and fifty surveys were sent out via e-mail and 42 surveys were completed. The response rate was 35.7 percent, which is to be expected for an electronic survey. Schools were chosen at random, and out of 40 responses, 18 different counties were represented, and they are as follows (see figure 1): Hennepin County (8 schools), Dakota County (5), Washington County (4), Anoka County (3), Chisago County (3), Olmsted County (3), Ramsey County (2), Wright County (2), Carlton County (1), Carver County (1), Freeborn County (1), Isanti County (1), Jackson County (1), Le Sueur County (1), Scott County (1), Stearns County (1), St. Louis County (n=1), and Winona County (4). The total 40 respondents recorded which county they work in. The counties represented have a wide range of population that is served. Hennepin County would be the largest county that is reported and covers city schools, and a county such as Chisago County would be representative of a rural population, with a smaller population. Out of 40 responses, 26 people reported that their primary role at the school they work at is a school social worker (65 percent), 11 reported they were a school psychologist (28 percent) and 3 reported that they were a school counselor (8 percent). And, their current professional licensure is as follows: CMSP (1 respondent), GSW (1), LGSW (3), LICSW (12), LISW (1), LP (1), LSW (12), and school psychologist (10). See Figure 2.

Thirty (75 percent) of respondents reported that their school offers school-based mental health services to students, and 10 (25 percent) responded that they do not offer school-based mental health services to students (see Table 1). Twenty-five (78 percent) reported that they work 30 hours or more at their school they work at. Three (9 percent) reported they work less than 17 hours at their current school (see Table 1).

For the purpose of the current study, all grade levels kindergarten through 12th grade was considered. Thirteen (41 percent) reported they work in an elementary school, seven (22 percent) reported they work within a junior high setting, and 12 (38 percent) that they work within a high school. Some respondents reported that they work at multiple buildings, and one reported that they work with all the grade levels. It is assumed that the one respondent who works with all grade levels works in a small school setting, such as a rural school. A worker who works between buildings may work in a larger school district.

Respondents were also asked if their school has an agreement to provide behavioral health services when needed by students, 17 respondents reported that they have an agreement to provide services while six responded that they do not. It is assumed that it would be the individual school district or county that puts into place such an agreement. Respondents were also asked how many students are referred to them per month for mental health issues and three (9 percent) reported zero or one student, 14 (44 percent) reported two to six students, 11 (34 percent) reported seven to 11 students, and four (13 percent) reported 12 or more students per month. More populated schools may account for the larger number of referrals per month, whereas a school with a smaller population may account for the lower number of referrals per month. From the above

total number of referrals per month, five (16 percent) reported that they see zero to one student on a regular basis for mental health services, 10 (32 percent) reported they see two to six students regularly, five (16 percent) seven to 11 students regularly, and 11 (35 percent) reported they see 12 or more students on a regular basis for mental health services.

Effectiveness and Utilization of School-Based Mental Health Programs

The main purpose of this study is to examine the effectiveness and utilization of school-based mental health programs. In doing so, this study focuses on the five questions about their perceptions on school-based mental health programs and services. The first question asked if the student's mental health improved (refer to Table 2 for the details). Results indicate that one respondent strongly agreed that mental health did improve; 25 respondents agreed that mental health improved; and four respondents neither agreed nor disagreed that the student's mental health improved. If a school offers school-based mental health services, it shows that one's mental health can improve. One could assume that if a student is receiving mental health services in the school setting, their level of mental health would improve on some level. When the social workers and psychologists were asked "If your school offers a school-based mental health program, do you feel the students have improved their mental health" and 23.3 percent agreed that students mental health improved. One social worker reported that they have seen an increase in student's social skills and mental health. Along with improved mental health, respondents felt that if their school offered school-based mental health services, that the services provided were effective (non-specific to improved mental health), and out of 30 respondents, 28 agreed or strongly agreed that services were effective to the students.

The second question asked what type of therapy or intervention is used most when school-based mental health services are offered. The respondent was given five choices: Cognitive Behavioral Therapy, Social Skills Training, Solution Focused Therapy, Group Work, and Other. Sometimes more than one intervention is used, but social skills training (65 percent response) was the most used intervention followed by solution-focused therapy (32 percent response) and group work (32 percent response). Based on the responses provided, social skills training shows to be the most used intervention, and it is assumed that it is in direct correlation to the amount of time that is spent with a student during the school day and is limited to the duration of the school year. With social skills training, it may be more of an acceptable use of intervention because the social worker or psychologist is not providing direct mental health services to a student, but guiding them. It is assumed that not all parents would approve of their child receiving mental health services at school. But, providing social skills training, the student is receiving long-term tools to take with them and apply to almost any daily situation. In addition to the social skills training, social workers or psychologists could use role-playing, modeling and teaching to help assist the students practice their newly learned skills. Solution-focused therapy can provide the student with short-term goals and ways to obtain those goals, but does not specifically focus on big picture issues that a student may be experiencing, and would most likely receive a referral to an outside therapist. Since solution-focused therapy is focused on the individual, individual needs may be addressed more accurately and can empower the students desire to change versus hearing there is something wrong and they need to change their behavior. Group work was also a commonly used intervention, and once again, correlates with the amount of

time a social worker or psychologist has with the student. Group work is a way for a social worker or psychologist to work with multiple students who may be experiencing the same type of issue, whether it is social skills or needing help to improve study skills. Time may be less of an issue when doing group work since the worker works with multiple students at one time, and the group could meet weekly or bi-weekly. Also, with group work, it is assumed that it could also improve a student's social skills since the student is interacting with others on a weekly, bi-weekly or pre-arranged amount of time. It was assumed by the researcher that CBT would have been the therapy used the most, but this survey showed the researcher that it was one of the least used methods. One could assume that CBT is not widely used based on the limited amount of time a social worker or psychologist has with a child during the school day and that CBT is more of a specialized therapy that the social worker could lack the training and knowledge on how to most effectively use CBT with a student.

The third question asked the participants what they believe the benefits to school-based mental health services are. Qualitative research method was used with this question using an open-ended question to allow the respondent to express what they believe is benefits to school-based mental health services. Social workers and psychologists report that the need is high for mental health services and that chemical dependency issues are growing and therapists work with students in schools. Other benefits that were reported was that students have access to services that they probably never would have used; increased positive behavior for students and decreased stress on parents and teachers; ability for collaboration and communication between schools and providers; and being on-site and available during the school day were common benefits

as reported by school social workers and psychologists. A respondent reported: “Benefits of school-based mental health services provided by school personnel include service based on student’s actual performance and needs, seamless integration of educational and mental health services, and close collaboration with parents and teaching teams.” Also, one worker reported that they thought their school has an excellent support system for their students who are in need and that they have seen a rise in mental health issues in the past three 3 years. They have also expressed their concerns to administrators and that is what is helping keep the mental health services in their school. In alignment with past and current research, one worker reported about poverty, and this is what they had to say: “Students receive some mental health services which they would not have access to otherwise. Many students in our school live at or below poverty and there are many barriers which make it difficult for families to access mental health services for their children.” It is known that for those who live at or below poverty may not have the resources or knowledge available to them to reach out for mental health help, and that is when sometimes children may fall behind in school or get into trouble.

The forth question asked what they perceive as some of the challenges of school-based mental health services. Qualitative research method was used with this question using an open-ended question so the respondent felt they could answer as honestly as possible without choosing between options the researcher felt would be appropriate challenges. There was a significant increase in response to challenges to school-based mental health services versus benefits to school-based mental health services. Some of the responses appeared to be overwhelming, but at the same time, provided insight to the reality of school social work and dealing with mental health issues. Many respondents

reported that there are too many students and not enough staff and also financial resources was a challenge. Other respondents reported that the support from other staff for mental health programs is terribly inadequate and limited amount of time to spend with the child. One social worker reported, “Our building of 700 students has one mental health therapist for 2.5 hours/week. I am the school social worker for the site-based Setting III EBD program in the building and I am here 40 hours/wk to provide Social Skills and individual time to a program with fewer than 20 students. The mental health support for the rest of the student body is terribly inadequate.” Another worker confirmed the concern of having too many students and not enough staff by stating, “some of the biggest challenges within my district involve training of staff, limited time to provide services, and liability issues when providing mental health services.” Another worker reported, “Financial. Parent consent for care is also an obstacle at times.” “We are a very small rural school with many low income children, so funding is a huge issue. In addition, we have a high number of non-English speaking students and non-citizen families which makes it difficult for both communication and permission...as well as funding,” reported another worker. Some schools may have outside professionals who may volunteer their time or are contracted with the school district, but one worker reported that “we have relationships with a number of community mental health professionals that come into the school to conduct their therapy sessions. The challenge is parent follow through in beginning the therapy sessions and ability to pay for outside counseling. Parent and therapist communication is also a challenge when the parent is not transporting the child to sessions.” In regards to funding, which is an issue for a number of school programs, one worker reports that, “lack of funding for school social

workers, counselors and psychologists. When external agencies provide school-based “mental health” services, the personnel are often interns or unlicensed and inexperienced. They tend to have little understanding of the student’s actual needs, the current educational system and what is expected and required from students. Collaboration is low and students are often pulled from important classes and educational services for their “mental health” services.”

The final question asked the participants how many students utilize the school-based mental health services. Out of 29 responses, 15 responded that they agree or strongly agree that school-based mental health services are utilized to their fullest potential if offered in their school; seven responded that they neither agree nor disagree that services are utilized to their fullest potential; and seven either disagreed or strongly disagreed that services were used to their fullest potential. According to the respondents, funding appears to be the big issue where 18 out of 28 respondents responded that funding is not adequate enough. Although funding may be an issue, schools are still able to provide services to students that they (respondents) feel are utilized to their fullest potential, and that the services are effective to the students. The majority of respondents feel that school-based mental health services that are provided in areas of academic achievement, improved social skills, and improved mental health, shows that services are being utilized. The number of students who utilize the services may not be at the maximum potential, but it is hoped that each academic year, the numbers increase, so there is a continued need for school-based mental health services.

Discussion

As mentioned above, more than 97 percent of five-to-17-year olds are enrolled in school, schools are in the unique position to identify mental health issues and provide links to appropriate services (Brenner et al., 2006). One social worker affirmed this by stating, "... students can miss less school time if they do access it and their feedback and information that could be shared between teachers and providers-since teachers sometimes spend more time with these kids than their parents."

Looking at the responses from the second sub-question asking school social workers and school psychologists the most frequent type of therapy or intervention provided, very little used Cognitive Behavioral Therapy. The majority of the responses were for social skills training, solution-focused therapy, and group work. After analyzing the data, it made more sense to not do CBT, as it is more of a specialized therapy and it is assuming that there are not enough psychologists and funding available to provide CBT in the school setting. CBT also requires more time commitment, and it makes sense that social skills, solution-focused therapy, and group work would be more widely used in the school setting.

Schools have a long history of providing mental health services in the schools due to the convenience for the children (Kutash et al., 2006) and respondents in the current research confirm that as well. According to respondents in the current research, many responded with, "students receive some mental health services which they would not have access to otherwise." Other responses included that it relieves financial burden from the parents; parents would not have to worry about transportation to and from

appointments; and most importantly, their child can meet with a therapist during the school day and good collaboration between all those involved with the student.

According to Evans (1999), school-based mental health programs have many benefits, including greater access and improved effectiveness as compared to clinic or hospital-based services. Respondents have also confirmed that there are many benefits to having a school-based mental health program in their school. Out of 29 responses, 13 agreed that school-based mental health services are utilized to its fullest potential in their school. 21 out of 30 respondents agreed that the services are effective to the students. The majority of the respondents also stated that with their school-based mental health program, students have improved not only their academic achievement, but also social skills and mental health. The majority of the respondents feel that services provided helps the students in all of the above areas (academics, social skills, and mental health), which shows that school-based mental health services are effective and utilized, as reported by the respondents.

School systems do have a major stake in assessing the effectiveness of school-based mental health services (Bruns et al., 2004) and it is believed that school districts in Minnesota may take a closer look at the effectiveness and utilization of school-based mental health services. Research studies like the one conducted is a good starting point, but there is more research to be done to really conclude if services are being utilized and the effectiveness of school-based mental health services. In the future, more qualitative studies may be done to talk with social workers, psychologists, and school personnel. Out of 40 responses, 30 responded that their school offers school-based mental health services to students. With a 75 percent positive response, it shows that schools are now

taking an initiative to provide services to students. It is unknown what the response would have been 20 years ago or what the response will be in 20 years. Out of 30 respondents, 15 (50 percent) responded that there is a memorandum of agreement to provide mental health services to students. There were several respondents that stated that they do not have a school-based mental health program, and 11 out of 13 respondents reported that they agree or strongly agree that services would be helpful in their school; 9 out of 12 responded they agree or strongly agree that their students would utilize the services; and 9 out of 13 agree or strongly agree that there would be enough support from the school and community to implement a program in the school. For those schools without school-based mental health services, the majority of respondents feel that a school-based mental health program would benefit the students and that their students would utilize the services. Seeking the support from the community and the school district is a very important aspect when planning on implementing school-based mental health services in the school. There may be resistance from the community and even school officials, but it is assumed that when school-based mental health services becomes more prevalent in the school setting, then others may begin to see the value in having the services available to students.

The use of Cognitive Behavioral Therapy (CBT) has been well documented in the school setting (Hoagwood & Erwin, 1997), but there is a need to assess whether CBT based interventions in schools are effective and whether they can reduce inequalities in young people's mental health (Kavanagh et al., 2009). Based on this information, it is no surprise that CBT was one of the least reported uses of therapy or intervention in schools. CBT has been proven to be an effective therapy, but there is also a time commitment that

many are unable to make, and more importantly, administer within the school setting. For such a specialized treatment, one could assume that referral to an outside provider such as a psychologist or psychiatrist would be needed. In some cases, schools do make referrals to community providers, but for the purpose of this study, therapies or interventions only used within the school setting is being considered.

Implications for Social Work Practice

One major implication is that some parents, educators and even professionals may feel that school is not the setting to provide mental health services. Although the majority of the schools that responded offer some form of mental health services, even if it is not specifically labeled school-based mental health services. So, one could assume that clear boundaries would need to be set on what a school can and cannot provide to a student, and also confidentiality parameters. The number of students that are seen on a monthly basis seem to be low, with some schools reporting only seeing 1 student per month and some as many as more than 12 students per month. There is a wide range of students being seen per month, but when asked, it would be imperative to make it known that no matter how many students are seen per month, that the service is important and would be harmful if cut from the school or budget. One of the major concerns that was reported is funding. Funding appears to be the forefront issue, but at the same time, they are able to provide services to students that they (respondents) feel are utilized to their fullest potential and that the services are effective to the students.

It is a generalization that school-based mental health services should have advantages over clinic-based care (Evans, 1999), and according to respondents they agree with this. As reported by respondents, there is an increase in communication between

mental health staff and teachers/staff that help increase the functioning and achievement of a student. Also, school-based services have helped children improve behaviorally, therefore are able to concentrate better in the school setting. It was also reported that they feel students feel more safe receiving mental health services in the school setting and are better able to cope with issues they are facing. In a school setting, the staff has daily contact with the child, versus a clinic-based setting where it is once, maybe twice per week. In a school setting, they can monitor on a daily basis and communicate with an outside provider, but an outside provider does not have that advantage. Also, from a parent's perspective, one respondent reported that the parents they work with have been very happy because staff is readily available and students are more likely to receive steady, ongoing care. And. Lastly, it is a very positive support system for the students.

Social Work Education and Policy

More schools are recognizing the need for school-based mental health services and is becoming implemented more. It is believed that school social workers and school psychologists need to do is stay informed on the latest training for handling mental health issues in the school environment and ensure that they are practicing within the law and policy of the state and school district. Policy changes at national and state levels are putting more pressure on schools to provide mental health services to students and reviewing the effectiveness can be helpful when forming new policy changes (Hoagwood & Erwin, 1997). Implementing policy may prove to be harder than expected due to the complexities of the provisions to the No Child Left Behind Act and it has made it difficult for educators, stakeholders, and mental health professionals to understand the legalities of the correlation between the No Child Left Behind Act and the school mental

health movement. Awareness needs to be brought forth about the challenges to the No Child Left Behind Act and the schools role in providing mental health. One could believe that there are a few things that need to be implemented if the expansion of school-based mental health services arises, and those factors could include: advancement in training and advocacy, more research, more support and increased collaboration. If all of these factors could come together, the school-based mental health programs in schools would presumably be able to provide better services to the students.

Future Research

There is a need for further research to be conducted on a larger scale, with more schools over a longer period of time. Mental health issues are on the rise and it will be important to study the impact that mental health services have on the school setting. It is anticipated that in the future that with more research, school-based mental health services will become a “standard” service in schools and that schools will be staffed to handle a wide-range of mental health services.

With research studies that have already been conducted, Walter et al (2011) reported that after one year of intervention, students had significantly fewer mental health difficulties, less functional impairment, improved behavior, and reported improved mental health knowledge. It would be important to continue the longitudinal studies to show whether or not school-based mental health services continue to be effective year after year. It is understood that implementation of evidence-based programs in the schools will continue to be extremely limited, and that would be due to the time constraint with the children and the resources available. School psychologists and social workers are not in every schools budget, and in some cases, mental health services will

be one of the first areas to be cut from the budget. Another area that would be of interest to study is how socio-economic status plays a role in who gets the most funding, and what happens to those schools who serve primarily non-english speaking students or those at or below the federal poverty guideline.

Conclusion

Although research on school-based mental health services is not entirely current or new to the school setting, it would be anticipated by the researcher that new research will be conducted or released in the next five to ten years based on the growing need of mental health services. One growing aspect is that school-aged children spend the majority of their day in a school setting, and the school staff knows the children very well. It is not to discount parenting, but it is a fact that school-aged children spend the most time in school. If services can be provided within the school setting, it could be anticipated that special education referrals would decrease, negative social behavior would decrease, grades and academics would improve along with an increase in positive social skills.

School-based mental health services appear to constitute such advancement. There is considerable evidence to suggest that these services will prove to be a good value and fit for families, children, health care providers, and schools. In spite of the above value of school-based mental health programs, there is still too few studies completed to support the model.

Two of the major advantages of the school-based model for mental health are enhanced utilization and indications of enhanced effectiveness. Studies indicate that school-based services do improve utilization in a population that has historically underutilized the services. The increase of utilization may be related to the convenience of having mental health services available in the school. Further investigation is needed to determine if the concerns over the quality of care are legitimate and what schools could do to increase the confidential quality of care.

It is presumed that school-based mental health services will not replace clinic-based care because there are far too many students needing services than the school has resources for and there are too many schools that are also too small to accommodate a full mental health service in the school. There may also be a lack of professional training that would be needed to effectively operate a mental health clinic in the school.

Finally, school-based mental health programs may be the most efficient and effective model of treating many children since it can combine school and clinic services. The initial skills development part of behavioral and cognitive-behavioral interventions may be best delivered at a clinic. But, the application phase of treatment involving the transfer of skills to community setting may be best completed by clinicians working in schools. The partnership between clinic- and school-based care may take advantage of the strengths of both models of care.

References

- Adelman, H.S. (1995). Clinical psychology: Beyond psychopathology and clinical interventions. *American Psychological Association*, 2(1), 28-44.
- Adelman, H.S. & Taylor, L. (1999). Mental health in schools and system restructuring. *Clinical Psychology Review*. 19(2), 137-163.
- Adelman, H.S., Barker, L.A., & Nelson, P. (1993). A study of a school based clinic: Who uses it and who doesn't? *Journal of Clinical Child Psychology*, 22, 52-59.
- Anglin, T.M., Naylor, K.E., & Kaplan, D.W. (1996). Comprehensive school based health care: High school students' use of medical, mental health, and substance services. *Pediatrics*. 97, 318-330.
- Armbruster, P. & Lichtman, J. (1999). Are school based mental health services effective? Evidence from 36 inner city schools. *Community Mental Health Journal*. 35, 493-504.
- Brener, N., Weist, M., Adelman, H., Taylor, L., & Vernon-Smiley, M. (2007). Mental health and social services: Results from the school health policies and programs study 2006. *Journal of School Health*. 77(8), 486-499.
- Bruns, E.J., Walrath, C., Siegel, M.C., & Weist, M.D. (2004). School-based mental health services in Baltimore: Association with school climate and special education referrals. *Behavior Modification*. 28(4), 491-451.
- Center for Mental Health in Schools at UCLA. (2005). Youngsters' mental health and psychosocial problems: What are the data? Los Angeles: Author.
- Chandra, A., & Minkovitz, C. (2007). Factors that influence mental health stigma among 80 8th grade adolescents. *Journal of Youth Adolescence*, 36, 763-774.
- Clauss-Ehlers, C.S., & Weist, M. (2002). Children are newsworthy: Working effectively with the media to improve systems of child and adolescent mental health. In H.S. Ghuman, MD Weist, & R. Sarles (Eds). *Providing mental health services to youth where they are: school and other community based approaches*. New York: Taylor Francis.
- Durlak, J.A. (1997). Primary prevention programs in schools. In T.H. Ollendick and R.J. Prinz (Eds.), *Advances in Clinical Child Psychology*, 19, 283-318.
- Evans, S. (1999). Mental health services in schools: Utilization, effectiveness, and consent. *Clinical Psychology Review*. 19(2), 165-178.
- Evans, S., Weist, M., & Serpell, Z. (2007). *Advances in School-Based Mental Health Interventions*. Kingston, NJ: Civic Research Institute, Inc.
- Flaherty, L., Weist, M., & Warner, B. (1996). School-based mental health services in the United States: History, current models and needs. *Community Mental Health Journal*. 32, 341-352.

- Hoagwood, K. & Erwin, H. (1997). Effectiveness of school-based mental health services for children: A 10-year research review. *Journal of Child and Family Studies*, 6(4), 435-451.
- Garrison, E., Roy, I., & Azar, V. (1999). Responding to the mental health needs of latino children and families through school-based services. *Clinical Psychology Review*, 19, 199-219.
- Hussey, D.L., & Guo, S. (2003). Measuring behavior change in young children receiving intensive school-based mental health services. *Journal of Community Psychology*, 31, 629-639.
- Jennings, J., Pearson, G., & Harris, M. (2000). Implementing and maintain school-based mental health services in a large, urban school district. *Journal of School Health*, 70(5), 201-205.
- Kavanagh, J., Oliver, S., Lorenc, T., Caird, J., Tucker, H., Harden, A., Greaves, A., Thomas, J., & Oakley, A. (2009). School-based cognitive-behavioural interventions: A systematic review of effects and inequalities. *Health Sociology Review*, 18, 61-78.
- Kolbe, L. (2005). A framework for school health programs in the 21st century. *The Journal of School Health*, 75(6), 226-228.
- Kutash, K., Duchnowski, A., & Lynn, N. (2006). School-based mental health: An empirical guide for decision-makers.
- Kury, K. & Kury, G. (2006). An exploration into the internal dynamics of a school-based mental health collaboration. *Journal of School Health*, 76(5), 164-168.
- Masia-Warner, C., Nangle, D., & Hansen, D. (2006). Bringing evidence-based child mental health services to schools: General issues and specific populations. *Education & Treatment of Children*, 29(2), 165-172.
- Nastasi, B., Moore, R., Varjas, K. (2004). School-based mental health services: Creating comprehensive and culturally specific programs. Washington, D.C: American Psychological Association.
- National Center on Education Statistics (1994). *Digest of Education Statistics*. Washington, DC: Government Printing Office.
- New Freedom Commission on Mental Health. *Achieving the promise: Transforming mental health care in America. Final report*. Department of Health and Human Services, 2003. DHHS publication SMA-03-3832.
- Paternite, C. (2005). School-based mental health programs and services: Overview and introduction to the special issue. *Journal of Abnormal Child Psychology*, 33(6), 657-663.
- Pelham, W.E., Massetti, G.M., Wilson, T., Kipp, H., Myers, D., Standley, B.B., & Waschbusch, D.A. (2005). Implementation of a comprehensive behavioral intervention: The ABC program. *Journal of Attention Disorders*, 9(1), 248-260.
- 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 Schools*, 36, 371-378.
- Roanes, M. & Hoagwood, K. (2000). School-based mental health services: A research review. *Clinical Child and Family Psychology Review*, 3(4), 223-241.

- Slade, E.P. (2002). Effects of school-based mental health programs on mental health Service use by adolescents at school and in the community. *Mental Health Services Research, 4*(3), 151-166.
- Stiffman, A.R., Earls, F., Robins, L.N., & Jung, K.G. (1988). Problems and help seeking in high-risk adolescent health clinics. *Journal of Adolescent Health Care, 9*, 305-309.
- Stokes, T.F., & Baer, D.M. (1977). An implicit technology of generalization. *Journal of Applied Behavior Analysis, 10*, 349-367.
- Taras, H., Young, T. (2004). Committee on School Health: School-based mental health services. *American Academy of Pediatrics, 113*(6), 1839-1844.
- Tyack, D. (1992). Health and social services in public schools: Historical perspectives. *The Future of Children, 2*, 19-31.
- United States Department of Health and Human Services. (2000). Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda. Washington, D.C: US Government Printing Office.
- U.S. Department of Labor, Bureau of Labor Statistics (1994). *Occupational Outlook Handbook*. Washington, DC: Government Printing Office.
- Vanderbleek, L. (2004). Engaging families in school-based mental health treatment. *Journal of Mental Health Counseling, 26*(3). 211-224.
- Walter, H., Gouze, K., Cicchetti, C., Arend, R., Mehta, T., Schmidt, J., & Skvarla, M. (2011). A pilot demonstration of comprehensive mental health services in inner-city public schools. *Journal of School Health, 81*(4), 185-193.
- Weist, M., Sander, M., Axelrod Lowie, J., & Christodulu, K. (2002). The expanded school mental health framework. *Annual Theme 2002, 269-273*.
- Whitman, C., Aldinger, C., Zhang, X., & Magner, E. (2008). Strategies to address mental health through schools with examples from China. *International Review of Psychiatry, 20*(3), 237-249.

Appendix A Informed Consent

My name is Holly Kline and I am a master of social work student at the University of St. Thomas and the College of St. Catherine in St. Paul, MN. I am conducting a research study to examine the effectiveness and utilization of school-based mental health services provided in schools in the state of Minnesota. I request your participation in this study and as a licensed social worker and/or school psychologist, your knowledge is essential to this research process. It is not necessary for your school to have a school-based mental health service program in place. The records of this study will be kept confidential and your participation is completely voluntary. Please direct any questions to me at klin2985@stthomas.edu and/or 651-208-3114. If you agree to participate in this study, please click the link below and you will be guided to an informed consent document, which will initiate the beginning of the study.

As a participant in this study, it is not essential that your school has a school-based mental health program in place. As a participant, you will be given the chance to answer questions regarding whether services would be beneficial in your school. If your school does have a school-based mental health service program in place, information regarding the programs effectiveness and the utilization of services by the students will be examined. The records of this study will be kept confidential and your participation is completely voluntary.

Risks and Benefits:

The are no anticipated risks or benefits to your participation in this study. The records of this study will

be kept confidential. Your participation in this study is completely voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of St. Thomas or the College of St. Catherine.

By completing the survey you indicate your consent to participate in this research. The participant will have given consent through the completion of the survey. If they do not agree with participating in the survey, they do not need to complete the survey.

Appendix B Survey

By completing the following survey, you give permission to Holly Kline to use the information provided for research. Your participation is completely voluntary and confidential. All responses will be kept confidential and will be destroyed by May 30, 2013. For the purpose of this study, school-based mental health services will refer to any mental health services delivered to a student within a school setting by a school social worker, counselor, or psychologist. Mental Health will refer to the students' emotional and psychological well-being and their ability to function day-to-day.

1. Please fill in the information below:
 County you work in: _____
 Position/Title: _____
 Current Licensure: _____
2. What is your primary role at the school where you work?
 Social Worker: _____
 Counselor: _____
 Psychologist: _____
 Other (specify): _____
3. Does your school offer school-based mental health services to students?
 If yes, please complete the survey in its entirety.
 If no, please skip to question 15.
4. On average, how many hours per week do you spend at the school each week?
 0 to 8 hours: _____
 9-17 hours: _____
 18-23 hours: _____
 24-29 hours: _____
 30 or more hours: _____
5. The school where you work is:
 Elementary School (specify grade levels): _____
 Junior High School (specify grade levels): _____
 High School (specify grade levels): _____
 Other (specify grade levels): _____
6. How long have you worked in this school?
 0-1 year: _____
 1 to 3 years: _____
 4 to 5 years: _____
 6 to 10 years: _____
 11 or more years: _____
7. Does the school where you work have an arrangement through contract, memorandum of agreement, or similar method to provide behavioral health services to students?

Yes No Don't know

Please use the following scale for the questions below: **1=Strongly Agree**
2=Agree 3=Undecided 4=Disagree 5=Strongly Disagree

15. If your school does **not** offer a school-based mental health program
- d. Do you think services would be helpful in your school
1____2____3____4____5____
 - e. Do you think students would utilize the services
1____2____3____4____5____
 - f. Do you think there would be enough support from the school and community to implement a program in the school
1____2____3____4____5____

16. Please specify what you perceive as **challenges** to school-based mental health services within your school, **if applicable**.

17. Please specify what you perceive as **benefits** to school-based mental health services within your school, **if applicable**.

18. Please specify any additional questions or comments regarding the effectiveness and utilization of school-based mental health services or treatment provided.

Table 1. Participants' Characteristics

| Variable | Value | Frequency | Percent |
|--|---------------------------|-----------|---------|
| School-based mental health services offered to students? | Yes | 31 | 75.6 |
| | No | 10 | 24.4 |
| Position/Title | Social Worker | 26 | 63.4 |
| | School Psychologist | 11 | 26.8 |
| | School Counselor | 3 | 7.3 |
| | Other | 1 | 2.4 |
| Hours spending at the school each week? | 9 to 17 hours | 3 | 7.3 |
| | 18 to 23 hours | 2 | 4.9 |
| | 24 to 29 hours | 2 | 4.9 |
| | 30 or more hours | 26 | 63.4 |
| School Setting | Elementary School | 13 | 31.7 |
| | Junior High/Middle School | 8 | 19.5 |
| | High School | 12 | 29.3 |

Table 2. Effectiveness of School-Based Mental Health Programs

| Variable | Min | Max | Mean | S.D. | N |
|--|-----|-----|------|------|----|
| The students have improved their academic achievement, | 2 | 3 | 2.33 | .19 | 29 |
| The students have improved social skills. | 1 | 4 | 2.20 | .55 | 30 |
| The students have improved their mental health. | 1 | 3 | 2.07 | .37 | 29 |

Note. 1=strongly agree; 2=agree; 3=undecided; 4=disagree; 5=strongly disagree

Table 3. Utilization of School-Based Mental Health Programs

| Variable | Min | Max | Mean | S.D. | N |
|---|-----|-----|------|------|----|
| Services would be helpful in your school. | 1 | 3 | 1.77 | .73 | 13 |
| Students would utilize the services. | 1 | 3 | 2.00 | .74 | 12 |
| There would be enough support from the school and community to implement a program in the school. | 1 | 4 | 2.23 | 1.01 | 13 |

Note. 1=strongly agree; 2=agree; 3=undecided; 4=disagree; 5=strongly disagree

Figure 1. School Locations by County

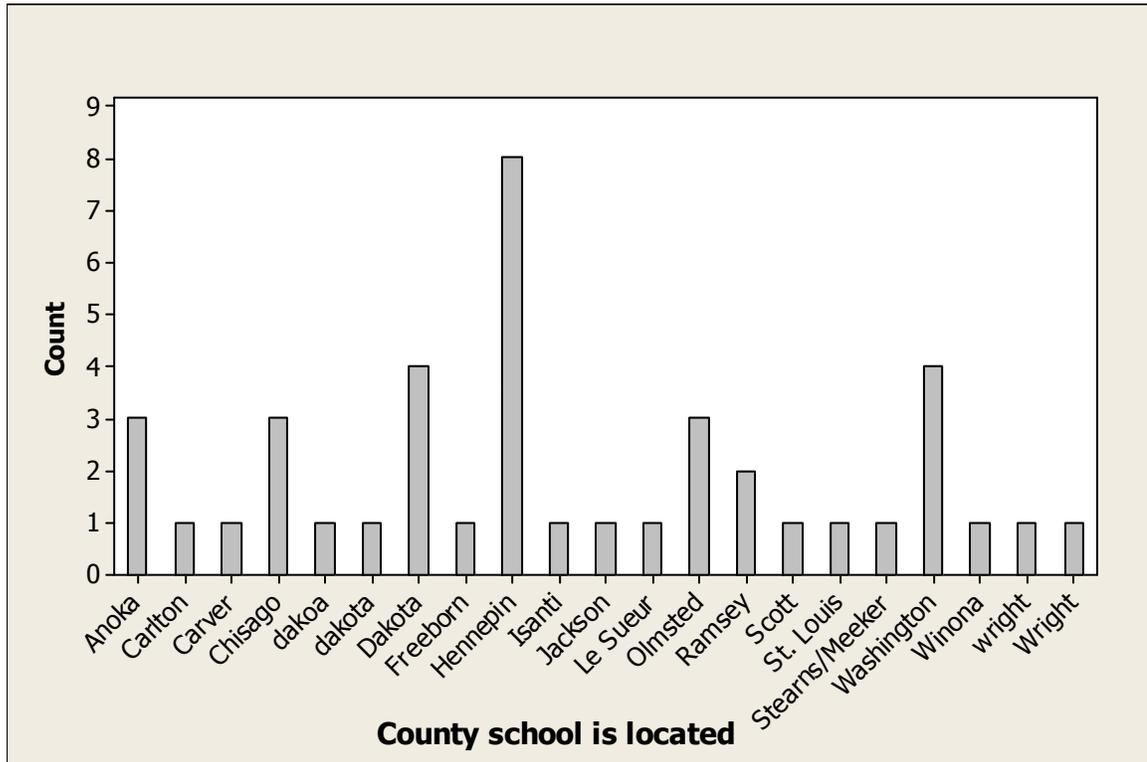


Figure 2. Participants' Current Licensure

