## Increasing Access to Care by Delivering Mental Health Services in Schools: The School-Based Support Program

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#### **Abstract**

It is widely estimated that approximately 25% of school age youth face mental and behavioral health challenges. The vast majority of these youth are insufficiently treated, leaving them vulnerable to negative school outcomes such as attendance, behavioral, and academic problems. One common barrier to treatment is a lack of access to appropriate and consistent care including assessment and intervention. Often when students are identified in schools as potentially struggling with mental health issues, the child is referred out to the community for treatment. While well-intended, this approach is largely unsuccessful if families face challenges such as a language barrier, a lack of transportation or health insurance, or lack of flexibility with their jobs leaving them unable to make appointments. A unique school–community partnership in North Carolina attempted to overcome these obstacles by bringing mental health services to youth at the school campuses. The School-Based Support program largely mitigated problems with access to care and made a positive impact on school outcomes for youth. This report from the field describes the consequences of untreated mental health problems among children, barriers to receiving mental health treatment, and ways student mental health needs are currently addressed in schools. We then detail how the School-Based Support program was formed through a school-community partnership, the program components, evaluation results, and a case example.

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Key Words: school–community partnerships, schools, mental health, services, academic achievement, social outcomes, behavioral outcomes

### Introduction

It is estimated that approximately 25% of youth ages 5-18 have experienced a mental disorder during the past year, and more than 30% of children and adolescents are expected to experience at least one mental health condition during the course of their lifetime (Merikangas et al., 2010). More specifically, about 5% of children between the ages of 5 and 12 years old are expected to experience an emotional, behavioral, or developmental condition in any given year (Ghandour, Kogan, Blumberg, Jones, & Perrin, 2012). Examples of such conditions include depressive disorder and generalized anxiety disorder, both of which are highly prevalent in youth (National Institute of Mental Health [NIMH], 2012), and signs and symptoms first tend to appear during childhood (Merikangas et al., 2010). The onset of major mental illness can occur as early as 7 to 11 years old, and roughly half of all lifetime mental health disorders start by the time a child is in his or her mid-teens (Stagman & Cooper, 2010). Despite a large body of evidence substantiating the growing prevalence of mental health conditions among children and adolescents (Merikangas et al., 2010), the majority of youth with mental disorders do not receive treatment (Ghandour et al., 2012; Merikangas et al., 2010). There are often long delays—sometimes decades—between the first onset of mental health symptoms and when individuals seek and receive treatment (Kessler et al., 2005).

The purpose of this report from the field is to describe the consequences of untreated mental health problems among children, barriers to receiving mental health treatment, and ways student mental health needs are currently addressed in schools. We then describe an innovative school—community partnership that was designed to overcome many of the barriers to receiving mental health services and the limitations of other models of delivering mental health services in schools.

### Consequences of Untreated Mental Health Problems

Lack of adequate treatment to address mental health needs can have serious implications for children, including greater difficulty in academic performance and increased vulnerability to various negative school outcomes. According to the Centers for Disease Control and Prevention, almost 10% of school-aged children have limited ability to perform academic tasks appropriate for their age group due to mental or emotional problems (Joe, Joe, & Rowley, 2009).

More specifically, untreated mental health conditions may influence school enrollment, rates of absenteeism, cognitive abilities, and capacity to focus on classroom instruction and homework (Joe et al., 2009). Additionally, without proper mental health intervention, students are likely to achieve lower math and reading scores (Bussing et al., 2012; Corkum, McGonnell, & Schachar, 2010; DeSocio & Hootman, 2004; Geary, Hoard, Nugent, & Bailey, 2012), resulting in poorer overall educational outcomes such as lower high school grade point averages (GPA), higher retention rates, and greater probability of high school noncompletion or dropout (Bussing et al., 2012; DeSocio & Hootman, 2004).

Further consequences for youth failing academically as a result of untreated early onset mental health problems include greater risk of initiating substance use, sexual activity, and violence (Joe et al., 2009). These risky behaviors in adolescence and young adulthood can result in poorer outcomes in overall health, socioeconomic status, employment, and social adjustment (Duchesne et al., 2008; Joe et al., 2009). When considering the prevalence and negative consequences of untreated mental health problems among children and adolescents, it is clear that early intervention is needed to prevent these negative outcomes.

### **Barriers to Receiving Mental Health Treatment**

Unfortunately, there are multiple barriers that prevent many children from receiving the early mental health treatment that they need (e.g., Cuellar, 2015; DeRigne, Porterfield, & Metz, 2009; McKay & Bannon, 2004; Saechao et al., 2012). Many times, structural barriers interfere with a family's ability to access mental health services. Family members may feel like they have insufficient time to seek treatment (McKay & Bannon, 2004); in particular, family members often have difficulty securing appointments at times that are convenient to them and are not during their working hours (DeRigne et al., 2009; Mendez, Carpenter, LaForett, & Cohen, 2009). The location of services and ability to get to services is another structural barrier to receiving mental health treatment. Specifically, individuals might not have access to transportation, they may not know where to go to seek services, or the services may be inconveniently located or too far away (DeRigne et al., 2009; McKay & Bannon, 2004; Mendez et al., 2009; Owens et al., 2002). Owens and colleagues (2002) reported that 7.8% of their sample said children's mental health services were too inconvenient, and 15.5% said they did not know where to go to receive children's mental health services. Children and families who live in rural areas face particular challenges around the availability of mental health services. For example, 60% of rural Americans live in mental health professional shortage areas (U.S.

Department of Health and Human Services, 2012). More than half of all rural counties in the nation have no psychologists, psychiatrists, or social workers.

Another structural barrier that could impede seeking mental health treatment is the cost of services. Families may not be able to afford insurance, and even if they do have insurance, they may have high out-of-pocket costs for co-pays and co-insurance (Cuellar, 2015; DeRigne et al., 2009; Saechao et al., 2012). Data from the National Survey of Children with Special Health Care Needs indicated that 25% of parents reported the reason they did not get their child the mental health care or counseling he or she needed was because the services cost too much (DeRigne et al., 2009). Insurance plans may also only cover particular mental health treatments for a very time limited period (Cuellar, 2015; DeRigne et al., 2009; Saechao et al., 2012).

Stigma is often cited as a reason that people decided not to seek or fully participate in mental health treatment. People may feel embarrassed or ashamed to seek treatment because of the negative attitudes and beliefs the public has about individuals with mental illness. A meta- analysis of 44 studies that analyzed data on stigma barriers revealed that approximately 22% of participants across the studies reported shame/embarrassment, negative social judgment, and employee-related discrimination as barriers to seeking mental health services (Clement et al., 2015). Additionally, 32% reported disclosure concerns/confidentiality as a barrier to help-seeking (Clement et al., 2015).

Even if individuals have sought treatment in the past, they may not seek treatment again due to previous negative experiences with mental health services. In a study that examined barriers to the continuation of treatment among individuals with common mental disorders, 14% dropped out of treatment because they had a negative experience with a mental health provider (Mojtabai et al., 2011). Additionally, one-fifth of individuals dropped out of treatment because they perceived the treatment to be ineffective (Mojtabai et al., 2011).

As discussed in this section, there are many barriers that may prevent children and families from seeking the necessary mental health treatment. In order to address several of these barriers, an increasing emphasis has been placed on schools to be a primary site for mental health service delivery for children (Stormont, Reinke, & Herman, 2011). In a school setting, students are mandated to be present five days per week, and the school staff is comprised of a multidisciplinary team trained to work effectively with youth. Additionally, schools may be seen by children, youth, and families as more familiar, less threatening, and more acceptable locations to seek and receive mental health services than other traditional community service settings (Stephan, Weist, Katoka, Adelsheim, & Mills, 2007).

# Ways Student Mental Health Needs Are Currently Addressed in Schools

Schools currently have a variety of options for meeting student mental health needs. Often, individual staff will be charged with providing services on campus to students who have such needs, usually a school social worker, counselor, or psychologist (Paulus, Ohmann, & Popow, 2016). These school staff provide direct and indirect services to students, families, and school personnel to promote students' academic and social success (American School Counselor Association, n.d.; School Social Work Association of America, n.d.; National Association of School Psychologists, n.d.). The national average student-to-school staff ratio is 1:491 for school counselors (American School Counselor Association, 2014) and 1:1,381 for school psychologists (National Association of School Psychologists, 2017). While a national average staff-to-students ratio has not been reported for school social workers, a recent national study indicates that 44.8% of school social workers report serving one school, 19.4% serve two schools, 8.9% serve three schools, and 25.4% serve four or more schools (Kelly et al., 2015).

The disciplines of school social work, counseling, and psychology provide some formal training on common child mental health issues and special education in their degree-required education and curriculum. These trained school staff typically provide universal or targeted interventions (or both). Universal interventions are prevention-oriented services that are provided schoolwide to all students whether or not they have demonstrated a need. Examples include antibullying prevention programs through which education is provided across the entire student body. Targeted interventions are those provided to youth who are identified as higher risk because they have demonstrated a need. Examples include individual or group counseling interventions for students who display signs of depression or anxiety.

Regularly, a student may present a need that cannot be adequately addressed on the school campus. For example, a student may be suicidal or need to see a psychiatrist for medication. In such cases, a school staff member such as the social worker or counselor may refer the student and their family out to appropriate community resources where the needs can be properly treated. Referrals to outside community agencies is common practice and can be an effective way to get families connected to outside services that can positively impact the student and their performance in school. However, some families may struggle with outside referrals for a variety of reasons including transportation, language barriers, child care issues, inflexible employment, or lack of adequate insurance coverage. For families with these challenges, a referral out may not lead to any increased care or treatment for a student.

A good but less common model for meeting student mental health needs is utilizing school-based health centers. These are health centers that are physically connected to a school or even located within a school building. These employ medical and counseling personnel and are used for used for assessment, physical health services, and some counseling, medication, and mental health services. These are such great options for families due to the convenience of having all of these services available at the school site (Bersamin, Fisher, Gaidus, & Gruenewald, 2016). Unfortunately, they require substantial resources to initiate and sustain which results in school-based health centers being rare and unevenly distributed across the country.

Another option for treating student needs is bringing specific and targeted mental health staff and programming onto school campuses. Having a mental health professional who can assess and treat youth mental and behavioral issues on school campuses reduces barriers to traditional referrals out to the community (Mishna, Muskat, & Cook, 2012). Similar to the convenience of a school-based health center, families can have access to multiple services all in the comfortable and convenient location of the school without the costs associated with the center model. Previous research has indicated that some family members were initially reluctant to seek out school-based services for their children, but once they realized that their concerns would be treated seriously and confidentially, they were then more likely to use the school-based services (Wegmann, Powers, & Blackman, 2013). Additionally, studies have shown that students were more likely to seek counseling services when they were available in schools and that they perceived less stigma when services were provided in a school setting (Slade, 2002; Vernberg, Roberts, & Nyre, 2008).

One example of a mental health program that is delivered in the school setting is the School-Based Support (SBS) program. This program was designed to overcome many of the traditional barriers to receiving mental health services as well as the limitations described earlier among other models of delivering mental health services in schools. The following sections describe how this program was formed through a school–community partnership, the components of the program, evaluation results, and a case example of how the SBS program could operate in a school setting.

### **Description of the School Based-Support Program**

The SBS program originally started as a one-year multisystem partnership between a school district in the southeastern United States, a university, and the local mental health management entity (LME), which is the county's management care organization (Powers, Swick, Sneed, & Wegmann, 2016; Swick &

Powers, 2016; Swick, Powers, Wegmann, & Watkins, 2015; Wegmann, Powers, Blackman, & Swick, 2014). The overall goals of the SBS program are to (a) increase the capacity of elementary schools to recognize and meet the needs of students with mental health issues that threaten their school success; and (b) improve the academic and social/behavioral outcomes for children with mental health needs.

Research has indicated that mental health needs of students can be met through the partnership of the school system and a community mental health agency (Stroul & Manteuffel, 2007). Additionally, research has identified school mental health efforts as most effective when they function in school-community partnerships (Lehman, Clark, Bullis, Rinkin, & Castellanos, 2002). The SBS program is based on the Systems of Care framework, an approach to service provision that emphasizes the importance of family, school, and community partnerships and seeks to promote the full potential of every child by addressing needs through interagency coordination (Fette & Estes, 2009). Additionally, the Systems of Care framework places an importance on the delivery of strengths-based, systems-focused, and culturally competent services to children and their families (Fette & Estes, 2009).

Too often, systems such as school districts and community agencies function in isolation rather than in partnership with another (Center for Mental Health in Schools at UCLA, 2006). Not unlike other counties, in the county where the SBS program was implemented, the lack of coordination among systems had led to duplication of some services, such as multiple entities providing the same or similar parenting workshops and staff development opportunities. The lack of coordination and partnerships also led to significant gaps in services, such as failing to identify many youth needing services and a lack of regular and ongoing services, follow up, and communication among key stakeholders such as parents. Therefore, the SBS program was based on the notion of forming a strong partnership between the school district and the surrounding community.

The SBS program fit well with unique and specific needs within the school district where it was implemented. Though the district employed social workers, counselors, and psychologists, these trained professionals were unable to provide direct mental health services to youth for a variety of reasons. Social workers were assigned a priority duty of managing student attendance across the district. Unfortunately, due to the size and transiency of the student population, this task took up most of their time and did not allow for ongoing and consistent delivery of services to vulnerable students. School psychologists in the district were few, so their roles were minimized to only assessment and evaluation of students. School counselors were also limited and were focused

primarily on educational counseling for students. For these reasons, bringing in specialized staff (in the pilot year, a full-time mental health professional from the LME) who could deliver mental health services was essential for meeting student needs. Additionally, the partnership that formed between the LME and the school district was essential to linking students and their families with community resources and services.

Another unique issue within the district was the high rate of students being referred for special education testing for behavioral and emotional difficulties. Many of these students were not qualifying for exceptional children's programming, but their teachers were referring students for assessment because there were no other resources within the district to support them. For these reasons, the SBS program was very well received by teachers.

A university faculty member provided the original impetus for the pilot project through her previous work in the school district and sought funding for the pilot through a university grant. After the first year, the school district decided to not only assume the majority of the funding for the partnership, but also to expand it to six additional schools. Each entity (i.e., the school district, LME, and university) played a unique role in the initial partnership. The school district provided access to students, hired a part-time parent liaison, and provided in-kind resources such as office space, computers, and telephones. The LME provided a full-time mental health professional during the pilot year who served as the program manager. This individual had several years of experience in the community, was highly regarded in the community, and was familiar with the surrounding neighborhoods. After the pilot year of the program, the LME continued to provide consultation and services for referral, thus continuing to strengthen the school-community partnership that had been established. The university was responsible for program evaluation, and they also provided several social work field experience students who assisted project staff. Additionally, the university developed and delivered workshops to school staff on how to recognize signs and symptoms of the most common mental health disorders in youth and adolescents.

As the SBS program was implemented, each school formed an SBS team. District-wide funds, which were redirected from the Exceptional Children's budget, were used to hire a full-time program manager and a part-time parent liaison for each SBS team. The school psychologist, who was already employed at each school, also joined the SBS team, and dedicated a portion of his or her effort to the SBS team. The program managers were all trained mental health professionals who provided the direct services to students on their campuses and referred students to outside community agencies when their needs exceeded the assistance that could be provided within the school. The parent

liaisons provided home visits and worked closely with families to ensure there was a good relationship. The parent liaisons also assisted with connecting families to other resources and agencies within the community that might benefit them. The school psychologists administered and scored psycho-educational assessments, and they also served students through the identification of evidence-based interventions and the development of curricula for group counseling sessions. These three personnel worked closely with staff already employed at the schools—such as the school social workers, counselors, psychologists, and nurses—to form a multidisciplinary team.

Students are referred to the SBS program by adults in the school or home settings. Students can be referred for a number of reasons including behavioral issues, academic concerns, home issues (e.g., divorce of parents, caregiver incarceration, etc.), trauma (e.g., death of a relative, domestic abuse [either as a witness or survivor], sexual molestation, etc.), or health issues. Once students are referred to the program and assessed, they are eligible to receive a range of services, depending on their particular mental health, health, behavioral, and/or academic needs. These services include home visits, individual and small group counseling, classroom observations, staff consultation, tutoring and mentoring, behavioral plans and individualized educational plans, and referral to outside community agencies for more intensive services. All services provided through the SBS program were 100% free to the students and their families. The SBS staff collaborated with each other and other school staff to more effectively and purposefully assist students with mental health challenges. The goal was to meet as many needs on the school campus as possible and to provide ongoing and consistent care.

### **Evaluation of the School-Based Support Program**

The effectiveness of the SBS program was evaluated in a one-year evaluation study. The goal of the evaluation was to track students' academic and social/behavioral change over one academic year of participating in the SBS program. Data were collected on 322 students from six elementary schools in an urban southeastern school district in the United States. The sample was comprised of 64% males and 36% females. Of the sample 81% were African American, 5% were Caucasian, 10% were Hispanic/Latino, and 4% were other races. One quarter of the sample were receiving exceptional child (EC) services at the time of referral to the SBS program. Students who received EC services had been identified as having one or more of 14 eligible disabilities (e.g., autism, intellectual disability, speech or language impairment, etc.).

Each SBS program manager was responsible for collecting data throughout the year on all SBS staff actions related to each student's case. The following data were recorded for each student: (a) data of initial referral to the SBS program; (b) reason(s) for referral (i.e., behavioral, academic, home issue, trauma, or health); (c) the number of service types received (i.e., individual counseling, small group counseling, class presentation, services received from an outside agency, parent contact, home visits, tutoring, mentoring, staff consultations, or classroom observations/support); (d) demographics (i.e., race/ethnicity, gender, grade); and (e) whether or not the student was receiving EC services at the time of referral to the SBS program. Students' report cards were reviewed on a quarterly basis to collect data on their math and literacy grades and social/ behavioral indicator scores. For math and literacy grades, teachers recorded quarterly grades for students on a Likert-type scale from 1 to 4 (1 = does not meet the standard, 2 = partially meets the standard, 3 = meets the standard, 4 = exceeds the standard). For social/behavioral indicators, teachers recorded quarterly scores for students on a Likert-type scale from 1 to 3 (1 = unacceptable, 2 = acceptable, 3 = outstanding). An average math, literacy, and social/behavioral score was calculated for each student at each quarter.

Hierarchical linear modeling (HLM) was used to analyze students' outcomes over the course of one school year. Due to the longitudinal nature (i.e., data collected at four time points over the school year) and nested nature of the data (i.e., time nested within students and students nested within schools), HLM was deemed the most appropriate method of analysis. A two-level hierarchical linear growth model was used to estimate students' changes in math, literacy, and social/behavioral scores over the school year. Time was included at level 1, and student-level variables (i.e., gender, grade, ethnicity, EC status, services total, month of referral) were included at level 2. A three-level HLM was not appropriate for this study because the small number of schools (N = 6) at level three did not provide sufficient power to conduct this analysis (Mass & Hox, 2005). Additionally, the intra-class correlation at the school level was 0.05, which is well below the recommended cut-off of .25 to necessitate a three-level HLM analysis (Heinrich & Lynn, 2001).

The results revealed that students' math and literacy scores significantly improved over the course of the school year. Controlling for other variables, the average participating student's math scores significantly increased at a rate of .06 units ( $\beta$  = .06, SE = .01, p < .001) for every school quarter, and the average participating student's literacy score significantly increased at a rate of .04 units ( $\beta$  = .04, SE = .01, p < .001) for every school quarter. While there was also a slight increase in students' average social/behavioral scores, this increase was not statistically significant. The finding that students' math and literacy

average scores improved over time is a notable result, especially given that the sample in the evaluation study was comprised entirely of students who could be considered at risk for stagnant or declining grades due to their identified mental health needs and because academic material becomes more complicated throughout the school year (Breslau et al., 2009; Bussing et al., 2012; Geary et al., 2012).

The evaluation also revealed interesting findings with regard to EC status. Whether children were receiving EC services at the time of referral to the SBS program was significantly related to students' math and reading achievement. Students who had EC status at the time of referral to the SBS program had an average math score .42 units below students who did not have EC status at time of referral to SBS ( $\beta$  = .42, SE = .08, p < .001) and an average literacy score .47 units below students who did not have EC status at the time of referral to SBS ( $\beta$  = .47, SE = .07, p < .001). However, despite students with EC status exhibiting lower levels of math and reading achievement than students without EC status, SBS students with EC status still exhibited a positive trajectory of math and literacy achievement over the course of the school year. This finding may support a unique benefit of addressing the mental health needs of EC students, especially since previous findings have associated EC status with stagnant or adverse achievement outcomes (Bussing et al., 2012; Siperstein, Wiley, & Forness, 2011).

While the results of the evaluation are promising, several limitations should be noted, including (a) the lack of a comparison group to compare the achievement of students who participated in the SBS program with the achievement of students who did not participate in the SBS program, and (b) the subjective nature of the rating scale used on students' report cards to measure their academic outcomes. However, despite these limitations, the findings from the evaluation study suggest that the SBS program formed through a school–community partnership may support the academic achievement of students who have mental health needs (for additional details on evaluation findings, see Powers et al., 2016; Swick & Powers, 2016; Swick et al., 2015).

### Case Example of the School-Based Support Program

This section presents a case example to illustrate how the SBS program would operate in a school to address a child's mental health needs. A second grade teacher referred one of her new students, Javier, to the SBS team. (Note: all names used are pseudonyms.) She noted that he had only been in her class for about two weeks as he had recently moved. The SBS program manager found the teacher at lunch to learn more about her concerns, and the teacher

noted that Javier seemed withdrawn and sad on most days. The teacher also told the SBS program manager that he was doing quite poorly in class on assignments because he seemed upset and unable to attend to activities. The SBS program manager arranged a time to come and get Javier from class to talk with him.

The next day the SBS manager met with Javier in her office. After introductions they did a puzzle together while talking. Javier told her that he often felt very sad, and he did even before he moved to the new school. He told her that he cries a lot, and he does not always know why. The two agreed to meet regularly to talk and do puzzles together so the SBS program manager could begin to work with Javier.

The same day the parent liaison called and visited Javier's home to introduce herself to his mom with whom he lives. The liaison welcomed his family to the school and explained the concern shared by the teacher. Javier's mom stated that he has been sad like this for about six months and said she does not know why or what changed. She shared that she was worried about him as well and agreed to come in the next day to talk with the teacher and the manager about resources and options to help Javier.

Over the next three weeks many things were put into place to support Javier and his family. The SBS manager continued to meet regularly with Javier. He completed a depression scale at school and scored high enough to be diagnosable, so the SBS manager helped Javier's mom to make an appointment at a local clinic so that Javier could be assessed by a psychiatrist. He was diagnosed and prescribed a low dose antidepressant. Additionally, the SBS manager started using a new curriculum to run a small group with second and third graders who were all dealing with depression and anxiety at school. The goal of the group was to ensure students did not feel isolated and to help the kids develop good coping mechanisms. Soon, the school psychologist will begin educational testing with Javier to evaluate his potential fit for special education services to assist him with academic challenges in school. During this time, the parent liaison also has been supporting Javier's mom by communicating regularly and addressing concerns and answering any questions she has.

Over the next months the SBS manager will continue working with Javier individually and in a small group. The school nurse will regularly check in with Javier's mom about his medication to ensure it is still working well and that he is still improving. The psychologist will finish educational testing and make recommendations about academic interventions to the classroom teacher and his mom. Finally, the parent liaison will also check in with the mom every month or so to monitor progress and support the family in any way that she can.

### Conclusion

Schools can be an ideal location to provide mental health services to children and their families as such services help reduce a number of barriers that many caregivers may encounter when they try to seek mental health services for their children. In a time of restricted federal and state funding for schools and of intense pressure to reach state-mandated achievement goals, schoolbased mental health might unnecessarily get pushed down the priority list. However, partnerships between schools and community mental health agencies provide schools an opportunity to expand mental health resources and effectively meet students' mental health needs within a community context. The SBS program is one example of such a multisystemic partnership. Findings from the evaluation of the program support the argument that the provision of school-based mental health services is a worthwhile investment in students' health, well-being, and academic achievement. The multiple psychological, social, and academic benefits of school-based mental health services provide all stakeholders with a case to advocate for comprehensive mental health services in schools. Even with limited resources, school-community partnerships can be formed, and comprehensive school-based mental health services can be created and implemented to effectively address children's mental health needs.

#### References

- American School Counselor Association. (n.d.). *Role of the school counselor*. Retrieved from <a href="https://www.schoolcounselor.org/administrators/role-of-the-school-counselor.aspx">https://www.schoolcounselor.org/administrators/role-of-the-school-counselor.aspx</a>
- American School Counselor Association. (2014). *Student-to-school-counselor ratio* 2013–2014. Retrieved from <a href="https://www.schoolcounselor.org/asca/media/asca/home/Ratios13-14LowestToHighest.pdf">https://www.schoolcounselor.org/asca/media/asca/home/Ratios13-14LowestToHighest.pdf</a>
- Bersamin, M. M., Fisher, D. A., Gaidus, A. J., & Gruenewald, P. J. (2016). School-based health centers' presence: The role of school and community factors. *American Journal of Preventative Medicine*, 51, 926–932.
- Breslau, J., Miller, E., Breslau, N., Bohnert, K., Lucia, V., & Schweitzer, J. (2009). The impact of early behavior disturbances on academic achievement in high school. *Pediatrics (Evanston)*, 123, 1472–1476. doi:10.1542/peds.2008-1406
- Bussing, R., Porter, P., Zima, B. T., Mason, D., Garvan C., & Reid, R. (2012). Academic outcome trajectories of students with ADHD: Does exceptional education status matter? *Journal of Emotional and Behavioral Disorders*, 20, 131–143. doi:10.1177/1063426610388180
- Center for Mental Health Schools in UCLA. (2006). School–community partnerships: A guide. Los Angeles, CA: Author.
- Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N.,... Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*, 45, 11–27.

#### SCHOOL COMMUNITY JOURNAL

- Corkum, P., McGonnell, M., & Schachar, R. (2010). Factors affecting academic achievement in children with ADHD. *Journal of Applied Research on Learning*, 3(9), 1–14.
- Cuellar, A. (2015). Preventing and treating child mental health problems. *Future of Children*, 25, 111–134.
- DeRigne, L., Porterfield, S., & Metz, S. (2009). The influence of health insurance on parent's reports of children's unmet mental health needs. *Maternal and Child Health Journal*, 13, 176–186. doi:10.1007/s10995-008-0346-0
- DeSocio, J., & Hootman, J. (2004). Children's mental health and school success. The Journal of School Nursing, 20, 189–196.
- Duchesne, S., Vitaro, F., Larose, S., & Tremblay, R. E. (2008). Trajectories of anxiety during elementary-school years and the prediction of high school noncompletion. *Journal of Youth and Adolescence*, 37, 1134–1146. doi:10.1007/s10964-007-9224-0
- Fette, C. V., & Estes, R. I. (2009). Community participation needs of families with children with behavioral disorders: A systems of care approach. *Occupational Therapy in Mental Health*, 25, 44–61.
- Geary, D. C., Hoard, M. K., Nugent, L., & Bailey, D. H. (2012). Mathematical cognition deficits in children with learning disabilities and persistent low achievement: A five-year prospective study. *Journal of Educational Psychology*, 104, 206–223. doi:10.1037/a0025398
- Ghandour, R. M., Kogan, M. D., Blumberg, S. J., Jones, J. R., & Perrin, J. M. (2012). Mental health conditions among school-aged children: Geographic and sociodemographic patterns in prevalence and treatment. *Journal of Developmental and Behavioral Pediatrics*, 33, 42–54.
- Heinrich, C. J., & Lynn Jr., L. E. (2001). Means and ends: A comparative study of empirical methods for investigating governance and performance. *Journal of Public Administration Research and Theory*, 11, 109–138.
- Joe, S., Joe, E., & Rowley, L. L. (2009). Consequences of physical health and mental illness risks for academic achievement in grades K–12. *Review of Research in Education*, 33, 283–309.
- Kelly, M. S., Thompson, A. M., Frey, A., Klemp, H., Alvarez, M., & Berzin, S. C. (2015). The state of school social work: Revisited. *School Mental Health*, 7, 174–183.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry, 62, 593–602.
- Lehman, C. M., Clark, H. B., Bullis, M., Rinkin, J., & Castellanos, L. A. (2002). Transition from school to adult life: Empowering youth through community ownership and accountability. *Journal of Child & Family Studies*, 11, 127–141.
- Mass, C. J. M., & Hox, J. J. (2005). Sufficient sample sizes for multilevel modeling. *Methodology, 1,* 86–92.
- McKay, M. M., & Bannon, W. M. J. (2004). Engaging families in child mental health services. *Child and Adolescent Psychiatric Clinics of North America*, *13*, 909–921.
- Mendez, J. L., Carpenter, J. L., LaForett, D. R., & Cohen, J. S. (2009). Parental engagement and barriers to participation in a community-based preventive intervention. *American Journal of Community Psychology, 44*(1–2), 1–14.
- Merikangas, K. R., He, J. P., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., & Swendesen, J. (2010). Lifetime prevalence of mental disorders in U.S. adolescents: Results from the National Comorbidity Survey Replication-Adolescent Supplement (NCS-A). *Journal of American Academy of Child Adolescent Psychiatry*, 49, 980–989.

#### MENTAL HEALTH SERVICES IN SCHOOLS

- Mishna, F., Muskat, B., & Cook, C. (2012). Anticipating challenges: School-based social work intervention research. *Children & Schools, 34*, 135–144.
- Mojtabai, R., Olfson, M., Sampson, N. A., Jin, R., Druss, B., Wang, P. S.,... Kessler, R. (2011). Barriers to mental health treatment: Results from the National Comorbidity Survey Replication (NCS-R). *Psychological Medicine*, 41, 1751–1761.
- National Association of School Psychologists. (n.d.). Who are school psychologists. Retrieved from <a href="https://www.nasponline.org/about-school-psychology/who-are-school-psychologists">https://www.nasponline.org/about-school-psychology/who-are-school-psychologists</a>
- National Association of School Psychologists. (2017). Shortages in school psychology: Challenges to meeting the growing needs of U.S. students and schools [Research summary]. Bethesda, MD: Author.
- National Institute of Mental Health. (2012). Any disorder among children. Retrieved from <a href="http://www.nimh.nih.gov/health/statistics/prevalence/any-disorder-among-children.shtml">http://www.nimh.nih.gov/health/statistics/prevalence/any-disorder-among-children.shtml</a>
- Owens, P. L., Hoagwood, K., Horwitz, S. H., Leaf, P., Poduska, J. M., Kellam, S. G., & Ialongo, N. S. (2002). Barriers to children's mental health services. *Journal of American Academy of Child and Adolescent Psychiatry*, 41, 731–738.
- Paulus, F. W., Ohmann, S., & Popow, C. (2016). Practitioner review: School-based interventions in child mental health. *Journal of Child Psychology and Psychiatry*, 57(12), 1337–1359.
- Powers, J. D., Swick, D. C., Sneed, C., & Wegmann, K. (2016). Supporting prosocial development through school-based mental health services: A multi-site evaluation of social and behavioral outcomes across one academic year. Social Work and Mental Health, 14, 22–41.
- Saechao, F., Sharrock, S., Reicherter, D., Livingston, J. D., Aylward, A., Whisnant, J.,...Kohli, S. (2012). Stressors and barriers to using mental health services among diverse groups of first-generation immigrants to the United States. *Community Mental Health Journal*, 48, 98–106.
- School Social Work Association of America. (n.d.). *School social worker's role*. Retrieved from <a href="http://www.sswaa.org/?page=721">http://www.sswaa.org/?page=721</a>
- Siperstein, G. N., Wiley, A. L., & Forness, S. R. (2011). School context and the academic and social progress of children with emotional disturbance. *Behavioral Disorders*, *36*, 172–184.
- 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, 151–166.
- Stagman, S., & Cooper, J. L. (2010). *Children's mental health: What every policymaker should know*. New York, NY: National Center for Children in Poverty.
- Stephan, S. H., Weist, M., Katoka, S., Adelsheim, S., & Mills, C. (2007). Transformation of children's mental health services: The role of school mental health. *Psychiatric Services*, 58, 1330–1338. Retrieved from <a href="http://ps.psychiatryonline.org/journal.aspx?journalid=18">http://ps.psychiatryonline.org/journal.aspx?journalid=18</a>
- Stormont, M., Reinke, W., & Herman, K. (2011). Teacher's knowledge of evidence-based interventions and available school resources for children with emotional and behavioral problems. *Journal of Behavioral Education*, 20, 138–147.
- Stroul, B. A., & Manteuffel, B. A. (2007). The sustainability of systems of care for children's mental health: Lessons learned. *Journal of Behavioral Health Services & Research*, 34, 237–259.
- Swick, D. C., & Powers, J. D. (2016). School-based mental health programming: Summary of results and recommendations for future evaluations. *International Journal for School-Based Counseling*, 7, 1–15.
- Swick, D. C., Powers, J. D., Wegmann, K. M., & Watkins, C. S. (2015). Promoting academic achievement through school-based mental health programming: Evaluation of math outcomes across one academic year. *Journal of Behavioral and Social Sciences*, 2(2), 113–123.

#### SCHOOL COMMUNITY JOURNAL

- U.S. Department of Health and Human Services, Health Resources and Services Administration. (2012). *Designated health professional shortage areas (HPSA) statistics*. Washington, DC: Office of Shortage Designation.
- Vernberg, E. M., Roberts, M. C., & Nyre, J. E. (2008). The intensive mental health program: Development and structure of the model of intervention for children with serious emotional disturbances. *Journal of Child and Family Studies*, 17, 169–177.
- Wegmann, K. M., Powers, J. D., & Blackman, K. F. (2013). Supporting vulnerable families through school-based mental health services: Results of caregiver and teacher focus groups. *Journal of Family Social Work, 16,* 297–313.
- Wegmann, K. M., Powers, J. D., Blackman, K. F., & Swick, D. (2014). Increasing access to mental health services in schools through community engaged research: Results from a one-year pilot project. School Social Work Journal, 39, 73–89.

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