

The Impact of School Mental Health: Educational, Emotional, and Behavioral Outcomes

Below are key highlights of the impact of school mental health. A more detailed summary of the literature, including empirical findings is provided on pages 2 -10.

- Between 14-20% of children and adolescents experience a mental, emotional, or behavioral disorder each year.
 - The majority of these children and adolescents do not receive treatment and without treatment may experience significant negative short- and long-term outcomes, such as substance use, risky sexual behavior, violence, and mental health difficulties.
- The high rates of under-identification, limited access to treatment, and low quality of mental health services for children and adolescents in the United States prompted the U.S. Surgeon General to declare this area a national public health crisis.
- In order to meet the needs of our nation's children and youth, it is critical to provide mental health care in schools.
- School mental health programs have significantly greater access to children and adolescents relative to community mental health centers.
- Over the past 20 years, policies and programs that integrate mental health services into the schools have burgeoned, and research continues to demonstrate their positive impacts on educational and mental health outcomes.
- School mental health programs have a positive impact across a variety of emotional and behavioral outcomes, and educational outcomes in children and adolescents. For example, studies show:
 - Improvements in behavioral and emotional symptoms
 - Increases in social competency
 - Increases in standardized reading and math test scores
 - Improvements in commitment to school
 - Increases in school attendance
 - Increases in grade point average
- Evidence suggests that school mental health programs help to improve service access and utilization in services for ethnic minority youth.
- Furthermore, *all* youth in schools can benefit from school mental health policies and programs that successfully promote social, emotional, and behavioral health, build positive school climate, and prevent school violence and dropout.
- In recognition of the severity of the crisis and the demonstrated benefits associated with school mental health, significant federal, state, and local support has been directed towards the development and implementation of school mental health programs nationwide.

The Impact of School Mental Health: A Summary of Educational, Emotional, and Behavioral Outcomes

Children's Need for Care and Their Unmet Needs

- A report by the Institute of Medicine revealed that between 14-20% of children and adolescents experience a mental, emotional, or behavioral disorder each year (National Academy of Sciences, 2009).
- Despite this widely documented need for care across the developmental spectrum (from preschool to college), the mental health needs of students are largely unmet.
 - Mental health services for preschool children are often limited and difficult to access (National Scientific Council on the Developing Child, 2008).
 - Approximately 70% of school-aged children with a diagnosable mental illness do not receive treatment (Greenberg, et al., 2003).
 - A small percentage of college students with mental health disorders actually seek treatment (Blanco, Okuda, Wright, et al., 2008).

Federal Support for School Mental Health

- Federal support for school mental health has increased significantly. The Surgeon General's report on Children's Mental Health (U.S. Public Health Service, 2000) and the President's New Freedom Commission report, *Achieving the Promise: Transforming Mental Health Care in America* (2003), recognize schools as a major setting for mental health care and a critical avenue for enhancing service utilization. The President's New Freedom Commission report includes as one of its nineteen direct recommendations to "improve and expand school mental health programs."

School Mental Health Increases Access to Care

- In order to meet the needs of all youth, it is critical to provide mental health care in natural settings, such as schools, and effectively partner with caregivers and communities (Kazak, Hoagwood, Weisz, Hood, Kratochwill, Vargas, & Banez, 2010).
- School mental health programs have significantly greater access to children and adolescents relative to community mental health centers, as evidenced by:
 - 70-80% of children and adolescents who receive mental health services access services in the school setting (Rones & Hoagwood, 2000).
 - Approximately 96% of children follow through with school mental health services after the initial referral; whereas only 13% of children follow through with referrals to community mental health centers (Catron, Harris, & Weiss, 1998).
- Twenty percent of students receive some form of school mental health services (Foster, Rollefson, Doksum, Noonan, Robinson, & Teich, 2005).
- School mental health programs have been successful in overcoming logistical barriers to care and decreasing the stigma of help seeking, which has resulted in dramatic improvements in access to care (Bringewatt & Gershoff, 2010).
- As the U.S. becomes increasingly diverse, school systems must be responsive to shifting demographics (Clauss-Ehlers, Weist, Gregory, et al., 2010). The need for culturally

sensitive and competent school mental health policies, programs, and practices should be highly prioritized given research demonstrating that minority and disadvantaged groups in the U.S. are less likely to (a) have access to mental health care and (b) receive quality care when they are able to access services (Garland, Lau, Yeh, et al., 2005). Evidence suggests that school mental health programs help to close the gap in services for ethnic minority youth (Snowden, & Yamada, 2005).

Benefits of School Mental Health

- Integrating mental health services within schools promotes an ecologically grounded, comprehensive approach to helping children and families by addressing their educational and concomitant emotional, behavioral and developmental needs (Atkins, Adil, & Jackson, 2001).
- A comprehensive literature review indicates that the most effective interventions are those that target the ecology or environments of the child, and are well-integrated into the learning environment (Rones & Hoagwood, 2000).
- School mental health programs promote the generalization and maintenance of treatment gains (Evans, 1999), enhance capacity for prevention and mental health promotion (Elias et al., 1997; Weare, 2000), and foster clinical efficiency and productivity (Flaherty & Weist, 1999).
- Beyond just students with diagnosable disorders, all youth in schools can benefit from school mental health policies and programs that successfully promote social, emotional, and behavioral health, build positive school climate, and prevent school violence and dropout (Bruns, Walrath, Siegel, & Weist, 2004; Schargel & Smink, 2001; U.S. Department of Health and Human Services, 2001; Weist & Cooley-Quille, 2001).
- When school mental health programs are successful in reaching the whole school, students and teachers feel that they are in a positive learning environment and there are fewer referrals to special education based on emotional/behavioral problems (Weist, Evans, & Lever, 2003).

Evidence for the Positive Impact of School Mental Health on Educational and Emotional/Behavioral Outcomes

- There is evidence that school mental health programs have an impact across a variety of emotional and behavioral problems in children and adolescents (Rones & Hoagwood, 2000). In addition, it has been well-documented that addressing mental health issues in youth can help reduce non-academic barriers to learning (Massey, Armstrong, et al., 2005), which can lead to the academic gains that are a focus of current and proposed reforms.
- When students' mental health needs are effectively addressed through school mental health programs, the following outcomes have been shown:
 - Reduced emotional and behavioral disorders such as attention deficit/hyperactivity disorder, depression, and conduct disorder (Hussey & Guo, 2003).
 - More likely to be engaged and feel connected to the school (Greenberg et al., 2005).

- Perform better academically (Greenberg et al., 2003; Welsh et al., 2001; Zins et al., 2004).
- Fewer special education referrals and decreased need for more restrictive placements among students at high-risk (Bruns et al., 2004).
- Higher graduation rates (Lehr et al., 2004).
- Improved behaviors in the school and decreased disciplinary actions (Jennings, Pearson, & Harris, 2000).
- Kutash, Duchnowski, and Green (2011) examined four different types of school-based mental health programs (i.e., the Integrated Program, the Milieu Program, the Pull-Out Program 1, and the Pull-Out Program 2) in youth with emotional disturbances served in special education.
 - Longitudinal analyses revealed improvement in either emotional or social functioning of youth across all four programs.
 - Three of the programs (Integrated, Milieu, and Pull-Out 1) demonstrated improvement in functional impairment.
- A universal review of classroom-based programming was conducted of 180 school-based studies (Payton, Weissberg, Durlak, Dymnicki, Taylor, Schellinger, & Pachan, 2008). Students in the Social Emotional Learning (SEL) programs demonstrated improvement in their social-emotional skills; attitudes towards self, school, and others; social behaviors; conduct problems; emotional distress; and academic performance. Students in the SEL programs also displayed an average gain on achievement test scores of 11 to 17 percentile points.
- The D.C. School Mental Health Program (SMHP), located within the Office of Programs and Policy in the D.C. Department of Mental Health, provides a full continuum of services including prevention, early intervention, and treatment services to youth, families, teachers and school staff (Parks, Dubenitz, & Sullivan, 2008). An evaluation of the DC SMHP during the 2007-2008 academic year suggested that students receiving school mental health services made significant improvements.
 - Based on pre- and post- surveys, students who participated in Good Touch Bad Touch (i.e., primary prevention) demonstrated significant improvements in their knowledge of protecting themselves from abuse.
 - Youth and parent hopefulness significantly increased from intake to discharge.
 - Youth, parents, and clinicians reported that students' everyday functioning, and behavioral and emotional symptoms significantly improved from intake to discharge.
 - Youth and parents endorsed high satisfaction with the treatment.
 - The number of students who met criteria for psychiatric disorders decreased after treatment, and demonstrated a significant improvement in global functioning.
 - More than 40% of clients demonstrated measured improvement in problem severity and overall functioning.
- The Responsive Classroom Approach is an approach to teaching that integrates social-emotional competence and academic learning within the classroom (Rimm-Kaufman, Fan, Chiu, & You, 2007). A study of 2,790 2nd-4th grade students across six schools (three experimental and three control) found that the students in schools using the Responsive Classroom Approach demonstrated statistically significant gains in standardized reading and math test scores, as compared to the control group.

- A study of 938 elementary students from either first or second grade, in 10 schools (five control and five intervention) in the Pacific Northwest, found that those randomly assigned to the Raising Healthy Children (RHC) intervention (i.e., teacher training on topics such as cooperative learning methods, strategies to enhance student motivation, and interpersonal skills) had significantly higher teacher- and parent-reported academic performance (Catalano, Mazza, Harachi, Abbott, Haggerty, & Fleming, 2003). Specifically, participating students had significantly higher teacher-reported academic performance and a stronger commitment to school, as well as demonstrated a significant decrease in anti-social behaviors and increased social competency compared to non-participating peers. Parent-reported outcomes also showed that participating students had higher academic performance, and a stronger commitment to school.
- A meta-analysis of 24 articles (published between 1990 and June 2006) which examined the impact of school mental health interventions on both mental health and educational outcomes found that 62.5% of the interventions studied demonstrated dually positive outcomes in regards to both mental health and education (Hoagwood, Olin, Kerker, Kratochwill, Crowe, & Saka, 2007). In addition, the authors identified 40 studies that focused exclusively mental health outcomes, with 95% reporting positive findings.
- A meta-analysis of 249 experimental and quasi-experimental studies of school-based psychosocial prevention programs for aggressive and disruptive behavior yielded effect sizes of 0.21 and 0.29 for universal and selected/indicated programs, respectively (Wilson & Lipsey, 2007).
- In an urban setting, elementary school children (n=201) who participated in a school-mental health program demonstrated statistically significant reductions in conduct disordered behavior, attention deficit-hyperactivity, and depressive symptomatology over the course of approximately one year (Hussey & Guo, 2003).
- Approximately 40 studies reviewed on the Good Behavior Game (a classroom management strategy in which the goal is to decrease disruptive behaviors such as talking, out of seat behavior, aggression, and name-calling) found almost immediate reductions in disruptive, aggressive, or inattentive behaviors (Tingstrom, Sterling-Turner, & Wilczynski, 2006).
- After one year of implementation of a comprehensive (i.e., universal, indicated, and intensive services) school mental health program within two schools in an inner-city urban school district, students demonstrated significantly fewer mental health difficulties, less functional impairment, and improved behavior. Students also reported improved mental health knowledge, attitudes, beliefs, and behavioral intentions. Furthermore, teachers reported significantly greater proficiency in managing mental health problems in their classrooms (Walter, Gouze, Cicchetti, Arend, Mehta, Schmidt, & Skvarla, 2011).

Impact of School-Based Health Centers on Student Outcomes

- According to the Children’s Health Insurance Reauthorization Act of 2009, a school-based health center (SBHC) is defined as “a health clinic that is (a) located in or near a school facility of a school district or board or of an Indian tribe or tribal organization; (b) organized through school, community, and health provider relationships; (c) administered by a sponsoring facility; (d) provides through health professionals, primary health services to children in accordance with State and local law, including laws relating to

licensure and certification; and (e) satisfies such other requirements as a State may establish for the operation of such a clinic.” The majority of these clinics are located in underserved, high needs areas, with large populations of vulnerable and often underserved youth.

- Mental health providers are located in 75% of school based health centers (SBHCs) (Strozer, Juszczak, & Ammerman, 2010). In addition, mental health care is the number one reason students visit SBHCs (Wasczak & Neidell, 1991).
- A longitudinal study examining SBHCs found effects of high school students’ usage of medical and mental health service on their academic outcomes (Walker, Kerns, Lyon, Bruns, & Cosgrove, 2010). The authors used a latent variable growth curve modeling approach to measure differences between 9th grade SBHC users versus non-users. Results indicated among high-risk students, there was a significant increase in grade point averages over time for students enrolled in mental health services as compared to those who were not using those services.
- A review of the literature provides support for the use of SBHCs as a means of increasing mental health services (Brown & Bolen, 2008). The authors encourage school psychologists and other mental health clinicians to partner with SBHCs to broaden their scope of care and help provide wraparound services to students and their families in the school environment.
- Results from a study of 2,114 ninth and eleventh grade students from seven inner-city public high schools (3 with SBHCs and 4 without SBHCs) found that substance use decreased in SBHC schools; whereas cigarette and marijuana smoking increased in non-SBHC schools (Robinson, Harper, & Schoeny, 2003).
- Schools that referred students to mental health services through a SBHC saw a 50% decrease in absences from students who were rated high on a psychosocial impairment (Gall, Pagano, Desmond, Perrin, & Murphy, 2000).
- In a state-wide examination of school-based programs, involvement in SBHC services was positively linked with students’ course credit completion and academic aspirations (Warren & Fancsali, 2000).
- A study of a large, urban school district found students’ absences were reduced by 32% after receiving school mental health services through SBHC (Jennings, Pearson, & Harris, 2000). In addition, district-wide there was a 95% decrease in office discipline referrals and a 31% decrease in failing grades after school mental health services were provided.
- A SBHC in Baton Rouge, Louisiana implemented a 4-year dropout prevention program (Witt, Vanderheyden, & Penton, 1999). Results showed a 30% decrease in absences and reduction in office discipline referrals after program implementation.
- A study examined three SBHCs that provided universal, targeted, and selective mental health services and prevention programming to students over a two-year time frame (Fiestier, Nathanson, Visser, & Martin, 1996). All three centers provided classroom instruction in violence prevention, peer mediation/conflict resolution training, individual counseling, a crisis hotline, classroom support for school health program, and participation in disciplinary proceedings. All SBHCs reported improved student attitudes and behaviors, fewer suicide attempts, fewer fights on campus, and increased student visits for mental health services.

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The mission of the Center for School Mental Health is to strengthen policies and programs in school mental health to improve learning and promote success for America's youth.

We welcome input regarding additional content that would help to document the impact of school mental health on educational, emotional and behavioral outcomes. Please contact Dr. Nicole Cammack, ncammack@psych.umaryland.edu, with any suggestions and/or feedback.

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