



MTSS-B Supporting Literature

Youth behavioral health needs

The need for social-emotional, mental, and behavioral health supports for youth is clear: 13% - 20% of U.S. children meet criteria for a mental health disorder and 5% of adolescents meet criteria for a substance use disorder. Of these, only 12% receive any services to address mental health and/or substance use concerns.¹ Without treatment, children with mental health disorders are at greater risk of negative outcomes including substance use, risky sexual behavior, violence, and more severe mental health difficulties.² The school dropout rate for students with severe emotional and behavioral needs is approximately twice that of other students.³

Readiness for learning

Engagement in learning requires a host of skills across social, emotional, and behavioral domains, including self-regulation and behavioral inhibition, emotion regulation, and goal-directed activity. Interpersonal skills are crucial to the creation and maintenance of positive relationships with teachers and peers within the school community, and underlying emotional states need to support attention and commitment to achievement.^{4,5} The brain's emotional centers and neocortical cognitive areas are highly intertwined, and because attention is a limited resource, a child who is trying to learn but distracted by distressing emotions has less available for listening, watching, and absorbing and retaining knowledge. Children who have been exposed to trauma or who have pre-existing mental health concerns are particularly vulnerable – though all students, universally, need well-developed social emotional competencies to support attention to learning.⁶

MTSS-B's preventative approach

In response to these needs, New Hampshire's Multi-Tiered System of Supports for Behavioral Health and Wellness (MTSS-B) was designed as a comprehensive system of social, emotional, and behavioral supports to promote student wellness and engagement in learning. Based on the Interconnected Systems Framework (ISF)⁷, MTSS-B blends research-based school mental health practices and socialemotional learning with an evidence-based tiered prevention framework (based on the Positive Behavioral Interventions and Supports model; PBIS^{8,9}) – that offers schoolwide social-emotional and behavioral programs at the universal level (Tier 1), targeted supports for at-risk students (Tier 2), and intensive, individualized services for the highest-need students (Tier 3). MTSS-B's central focus on social-emotional learning (SEL) promotes the healthy development and academic achievement of students¹⁰ and its additional emphasis on integrated school-community mental health partnerships is foundational to school mental health (SMH) models.¹¹ Extensive research has been conducted to validate the efficacy of both PBIS and SMH models, with growing research attention on ISF as a unique combination of the two. The following summary describes research-supported outcomes associated with these frameworks.



Increased access to needed services & resources

Youth access to social, emotional, and behavioral health services and resources is inequitably affected by factors such as geography, income, education, and other demographic characteristics. Schools offer a natural and critical access point for all students to address unmet mental health needs. Of the small fraction of youth who receive services for a mental health issue, 70% - 80% receive those services in school. Furthermore, youth are six times more likely to complete evidence-based treatments when offered in schools than in other community settings. In fact, 40% - 60% of youth who access treatment in traditional community mental health settings drop out of treatment early.¹² However, schools are often limited in their ability to adequately invest in, train and provide implementation support to staff to deliver coordinated, high-fidelity, evidence-based interventions to students. This can result in piecemeal delivery of interventions that produce weak or negligible outcomes for students in need.¹³ The MTSS-B framework prioritizes collaboration between schools and community mental health agencies to coordinate systems and train providers to deliver high-fidelity, evidence-based interventions on school grounds. Coordination of these services and resources through an approach such as MTSS-B should increase the likelihood of effectively addressing student and family needs and supporting their overall success.¹⁴



Enhanced social-emotional functioning

MTSS-B integrates SEL curricula into schools to promote the healthy development and academic achievement of students. When teachers integrate SEL with academic information, student understanding of the subject matter improves and problem behaviors decrease. SEL programming has been found to be effective for students from diverse family backgrounds and geographic contexts, improving test scores while decreasing emotional distress, disruptive behavior, and substance use.¹⁵ The positive effects of SEL tend to be strongest among children who are first exposed to SEL programs in kindergarten. Students who participate in SEL programs fare better than their peers – up to 18 years later – in terms of social, emotional, and mental health.¹⁶



Reduced student problem behavior & discipline events

A primary focus of MTSS-B is establishing schoolwide behavior expectations, acknowledgment systems, and behavior response plans with the goal of reducing problem behaviors that result in office discipline referrals (ODRs) and other disciplinary disruptions. A growing body of evidence shows that implementation of these practices – within a larger framework of supportive services – is associated with reductions in problem behavior and decreases in ODRs.¹⁷ Studies have further demonstrated a correlation between fidelity and problem behavior reduction: the higher the fidelity of implementation, the greater the reduction in ODRs and disciplinary events.¹⁸ All students, including the disruptive student, lose instructional time when problem behaviors interfere in the classroom. Office discipline referrals are costly events; students may lose 15 minutes or more of instructional time in the classroom, while administrators may spend 20 minutes or more managing each referral. Over the course of several years, reducing ODRs through high-fidelity MTSS-B can recapture thousands of hours of educational and administrative time that would otherwise be lost to preventable student problem behaviors.^{19,20}



Enhanced school climate

The National Center for Safe and Supportive Learning Environments defines as school climate as “the product of a school’s attention to fostering safety; promoting a supportive academic environment; and encouraging and maintaining respectful, trusting, and caring relationships throughout the school community.”²¹ There is a cyclical relationship between school climate and frameworks such as MTSS-B: a positive school climate creates favorable conditions for implementation, and delivery of high-fidelity MTSS-B practices can create positive learning environments that improve and sustain school climate.²² It has been shown that school climate is positively related to student academic achievement and school completion, improved social and behavior outcomes for students, and increased school safety, including lower rates of student isolation, bullying, weapon threats, and weapon use in schools. Healthy school climates are also associated with lower levels of teacher stress and increases in job satisfaction.²³



Improved school-family partnerships

An integrated delivery system is a core feature of MTSS-B, where school, mental health, community, and family partners collaboratively develop an intentional, integrated approach to choosing and implementing evidence-based interventions to support student behavioral health needs. MTSS-B can provide a useful structure to help school teams proactively organize their efforts to engage with families. When families contribute to decisions about student intervention and treatment, educators may be more successful in planning and delivering productive supports. Furthermore, involving families in decision-making allows them to take a more active role in supporting their student's learning and behavior at home. Families can create alignment between school and home by reinforcing school routines, expectations, and language in a home setting, which can contribute to improved student outcomes.²⁴

Improved attendance

School attendance problems – difficulties attending or getting to school, and/or various types of school absenteeism that can include tardiness, missed classes, early departure, or complete absence – are key “red flags” when identifying advanced social-emotional needs in children and adolescents.²⁵ The reasons behind school attendance problems are complex and vary from student to student, and thus have been difficult to address through typical prevention approaches. However, MTSS-B strategies such as screening, evidence-based assessment and intervention, a tiered continuum of supports, and data-based decision-making can help address student needs and ultimately reduce barriers to regular school attendance.²⁶

Improved academic achievement

Students participating in SEL curricula demonstrate improvements not only in self- and social-awareness, relationships, and decision-making skills, but also in academics and standardized testing.²⁷ SEL competencies have been linked to improved attitudes about school and academic performance; for example, students who are more self-aware and confident about their learning abilities try harder in school and are more likely to persist in the face of challenges. At the building level, MTSS-B's focus on schoolwide positive behavior expectations, caring teacher-student relationships, classroom management that maximizes productive learning time, and other environmental supports create conditions that promote academic achievement.²⁸ By recognizing and addressing a students' social-emotional needs through regular preventative screening and intervention, and by building a more respectful and caring school climate, MTSS-B increases positive academic outcomes for students whose academic performance may be impaired by physical or mental health issues.²⁹

¹ Hoover, S., Lever, N., Sachdev, N., Bravo, N., Schlitt, J., Acosta Price, O., Sheriff, L. & Cashman, J. (2019). *Advancing Comprehensive School Mental Health: Guidance from the Field*. Baltimore, MD: National Center for School Mental Health. University of Maryland School of Medicine.

² University of Maryland School of Medicine. (n.d.) *The Impact of School Mental Health: Educational, Social, Emotional, and Behavioral Outcomes*. Retrieved from <http://csmh.umaryland.edu/media/SOM/Microsites/CSMH/docs/CSMH-SMH-Impact-Summary-July-2013-.pdf>

³ Lehr, C. A., Johnson, D. R., Bremer, C. D., Cosio, A., & Thompson, M. (2004). *Increasing Rates of School Completion: Moving from Policy and Research to Practice. A Manual for Policymakers, Administrators, and Educators. Essential Tools*. National Center on Secondary Education and Transition, University of Minnesota (NCSET).

⁴ Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D. & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1): 405–432.

⁵ Bierman, K.L., Domitrovich, C.E., Nix, R.L., Gest, S.D., Welsh, J.A., Greenberg, M.T., et al. (2008). Promoting academic and social-emotional school readiness: The Head Start REDI Program. *Child Development*, 79(6), 1802-1817.

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⁸ pbis.org



- ⁹ Horner, R.H., Sugai, G., & Anderson, C.M. (2010). Examining the evidence base for School-Wide Positive Behavior Support. *Focus on Exceptional Children*, 42(8), 1-14.
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- ¹² Hoover, S., Lever, N., Sachdev, N., Bravo, N., Schlitt, J., Acosta Price, O., Sheriff, L. & Cashman, J. (2019). *Advancing Comprehensive School Mental Health: Guidance from the Field*. Baltimore, MD: National Center for School Mental Health. University of Maryland School of Medicine.
- ¹³ Weist, M. D., Hoover, S., Lever, N., Youngstrom, E. A., George, M., McDaniel, H. L., Fowler, J., Bode, A., Joshua Bradley, W., Taylor, L. K., Chappelle, L., & Hoagwood, K. (2019). Testing a package of evidence-based practices in school mental health. *School Mental Health*, 11(4), 692–706. <https://doi.org/10.1007/s12310-019-09322-4>
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