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The Need for Performance Standards in Preschools: Stealing Shamelessly from Comprehensive School Mental Health Literature

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Abstract

Young children are at-risk for developing significant mental health difficulties just as their older, school-aged peers. Preschool settings have increasingly attempted to proactively address early childhood socioemotional needs by expanding their prevention and intervention activities. A number of emerging best practices in promoting early childhood mental health have been proposed. However, there are no comprehensive performance standards for preschool mental health and limited guidance on how preschools can align themselves with best practices. This expansion in service scope parallels the development of Comprehensive School Mental Health Systems in K-12 schools. Resources and tools developed for K-12 educational settings may serve as a useful example for preschool mental health systems interested in quality comprehensive mental health care. This conceptual article will describe the prevalence of mental health difficulties in young children, review the current guidance on supporting mental health in young children, and provide support for adapting widely used K-12 school mental health performance standards to establish comprehensive standards for organizing and implementing high quality care systems in preschool settings.

Introduction

It is estimated that one in five children experience mental health difficulties (Merikangas et al., 2010); many go without treatment and many more are thought to go undiagnosed (Jenson et al., 2011). Frequently, primary care physicians identify young children's mental health difficulties (Kelleher et al., 2000) and many of the evidence-based treatments available target parents and/or classrooms. Both physicians and preschool staff report feeling overwhelmed trying to meet the socioemotional needs of children. There have been challenges adapting the multi-tiered system of support that provides a continuum of care for school-aged children for use in preschools as well (Shepley & Grisham-Brown, 2019). Unlike K-12 schools, preschools can vary in format and venue, ranging from family day care programs to more extensive and standardized programming such as Head Start and the Goddard School. This may contribute to the slower development of performance standards and best practices. Performance standards would allow preschool mental health stakeholders to monitor their programs and to develop improvement strategies to best serve their communities. Despite the importance of quality mental health care during early childhood, there is limited guidance for systems to assess and improve their care in accordance with best practices.

The Comprehensive School Mental Health System (CSMHS) literature provides a framework and set of performance standards for assessing and improving school mental health systems for K-12 schools (Connors et al., 2016). This can serve as a foundation for understanding how preschools, which constitute another large potential provider and referral source for early childhood mental health services, can establish performance standards for their own systems of care. This article will discuss: (1) the prevalence of mental health difficulties in preschool aged children, (2) limitations of emerging best practices, (3) how the comprehensive school mental health literature can inform our understanding of quality

in preschool mental health, and (4) implications for establishing performance standards for preschool mental health systems.

Prevalence of Early Childhood Mental Health Disorders

Young children can and do experience significant mental health problems. It is estimated that between 10-15% of preschoolers meet criteria for a mental health diagnosis (Egger et al., 2006; Foreman, 2015). Preschoolers demonstrate similar rates of common mental health disorders and patterns of comorbidity as school-age children (Egger & Angold, 2006). The behaviors and symptoms that indicate these disorders may present differently in young children than in older children and adults (Doll et al., 2000; Lieberman et al., 2004). Mental health differences that manifest early in life – such as pervasive developmental disorders, autism spectrum disorder (ASD), and attention-deficit/hyperactivity disorder (ADHD) – may all be identified in early childhood. Many diagnoses (e.g., ASD, ADHD, oppositional defiant disorder, post-traumatic stress disorder, anxiety disorders, depressive disorders) may present in the form of behavioral and emotional dysregulation (Angold & Egger, 2007; Egger & Angold, 2006; McGough & Barkley, 2004; Ros & Graziano, 2019; Volkmar et al., 2004). According to the National Survey of Children's Health administered by the Health Resources and Service Administration, 20% of children ages 3-5 were not described as "on-track" with self-regulation by their parents (Ghandour et al., 2021). Poor self-regulation and challenging behavior in early childhood can serve as predictors of long-term social, emotional, and behavioral development. They can also be used to help identify children at higher risk for poor outcomes without additional support (Claussen et al., 2021; Eisenberg et al., 2010; Ghandour et al., 2019). Young children who are not on track for important socioemotional developmental skills frequently do not receive needed services. Claussen et al. (2021) estimated that of the 3–5-year-old children considered developmentally not on track with self-regulation, only

half received developmental surveillance and one in four received educational, mental health, or developmental services.

Mental health concerns in early childhood are not merely transient expressions of distress or poor adjustment. In the absence of intervention, these difficulties can remain stable or escalate over time, just as they do in older children and adolescents (Briggs-Gowan et al., 2006). When not adequately addressed through effective intervention in early childhood, mental health issues can become more serious over time, enduring into adolescence (Dekker et al., 2007; Keenan et al., 1998; Shaw et al., 2003; Tremblay et al., 2004). Mental health concerns in early childhood can negatively impact a child's school readiness, social development, and capacity to learn. However, when attention is paid to effectively addressing early childhood mental health needs, intervention can positively impact the trajectory of many common disorders and promote better outcomes for children (National Scientific Council on the Developing Child, 2008/2012). Thus early childhood may be the most cost-effective time for delivering mental health interventions (Heckman, 2012).

Preschool Mental Health Services: The Current Landscape

The National Association for the Education of Young Children (NAEYC), an accreditation body for early childhood education and care centers, provides standards for supporting children including building positive relationships with adults, family engagement, regular assessment, and a curriculum that addresses all aspects of child development including socioemotional functioning (National Association for the Education of Young Children, n.d.) but does not specify standards for mental health services and supports. Head Start, a large federal program providing early childhood care and education to children from low-income families, has also established standards around child mental health and social and emotional well-being. Head Start highlighted the importance of supporting

children across a continuum of care including wellness promotion (i.e., providing supports for effective classroom management and positive learning environments) and working with mental health consultants to access mental health interventions, as needed (Early Childhood Learning & Knowledge Center, n.d., Table 1). However, Head Start does not include standards for implementation supports.

Table 1. *Head Start Standards published on their website (Early Childhood Learning & Knowledge Center, n.d).*

Standard	Best Practices
<i>Wellness promotion.</i> To support a program-wide culture that promotes children’s mental health, social and emotional well-being, and overall health, a program must:	<ul style="list-style-type: none">• Provide supports for effective classroom management and positive learning environments; supportive teacher practices and, strategies for supporting children with challenging behaviors and other social, emotional, and mental health concerns• Secure mental health consultation services on a schedule of sufficient and consistent frequency to ensure a mental health consultant is available to partner with staff and families in a timely and effective manner• Obtain parental consent for mental health consultation services at enrollment• Build community partnerships to facilitate access to additional mental health resources and services, as needed
Mental health consultants. A program must ensure mental health consultants assist:	<ul style="list-style-type: none">• The program to implement strategies to identify and support children with mental health and social and emotional concerns• Teachers, including family child care providers, to improve classroom management and teacher practices

health and social and emotional concerns through strategies that include using classroom observations and consultations to address teacher and individual child needs and creating physical and cultural environments that promote positive mental health and social and emotional functioning

- Other staff, including home visitors, to meet children's mental health and social and emotional needs through strategies that include observation and consultation
- Staff to address prevalent child mental health concerns, including internalizing problems such as appearing withdrawn and externalizing problems such as challenging behaviors
- In helping both parents and staff to understand mental health and access mental health interventions, if needed.
- In the implementation of the policies to limit suspension and prohibit expulsion as described in §1302.17

Note. Column titles were added by the authors and do not appear on the Early Childhood Learning and Knowledge Center's website

Although implementation standards have not been developed for preschool mental health systems, there have been advancements in developing standards to systematically assess and promote high quality implementation of *individual* preschool mental health interventions. The Early Childhood Mental Health Consultation (ECMHC) model has received much attention as a major component of Head Start programming. Researchers and practitioners have created conceptual frameworks, investigated its association with child and preschool outcomes, and provided resources for

evaluation (Benedict et al., 2007; Brennan et al., 2008; Green et al., 2006; Hepburn et al., 2007; Perry et al., 2010; Steed et al., 2013). Additionally, the Pyramid Model is an early childhood adaptation of Positive Behavioral Supports and Intervention frameworks in K-12 schools, with associated implementation recommendations to improve the execution of the tiered intervention (Fox et al., 2003; Hemmeter et al., 2006; Dunlap et al., 2013). The Pyramid Model and the ECMHC model are both designed to be part of comprehensive systems of care in order to improve staff training and recognition of positive behavior management strategies, classroom management skills, and socioemotional difficulties while providing parents and students with additional supports to address concerns early. This includes referrals to community partners for additional services as necessary. The interventions champion data-driven decision making and center professional development and collaboration (Fox & Hemmeter, 2009; Hepburn et al., 2007), two strategies that may contribute to the success of interventions (Cook et al., 2019; Owens et al., 2014). Including guidance on implementation of performance standards may be helpful in ensuring interventions are carried out with fidelity, linked to improvements in outcomes, and sustainable.

Emerging standards describe important elements of a comprehensive approach to providing mental health services and supports. Table 1 describes components of the Head Start Performance Standards (Early Childhood Learning & Knowledge Center, n.d.) , including community partnerships, working with families, supporting teachers, and promoting mental health while simultaneously offering avenues for families to address mental health concerns. However, these standards do not include methods for screening or progress monitoring, even though they are important for determining risk and matching interventions (Feeney-Kettler et al., 2010). Additionally, beyond securing a mental health consultant, there are no standards for how the staff should organize to address socioemotional functioning or work

without the mental health consultant. By expanding focus from *what* interventions to provide to support children and families to *how* to create and manage a high quality, comprehensive system of care, future research can expand upon standards championed by Head Start. Establishing and operationalizing performance standards for comprehensive preschool mental health follows a long history of defining performance standards in education, health care, and their intersection in K-12 comprehensive school mental health (Connors et al., 2016).

Comprehensive School Mental Health Framework and Applications for Preschool

It may be fruitful to follow the recommendation of the Institute for Healthcare Improvement Breakthrough Series Model for learning collaboratives to “share seamlessly and steal shamelessly.” This encouragement allows for adapting empirically-sound, existing models of CSMH quality for the preschool context. Using existing examples of performance standards as a starting point for determining context-specific domains and quality indicators is a common practice in developing performance standards (Connors et al., 2016). Also, there are a number of existing standards that may, in combination and with adaptations, meet preschool mental health needs.

Although performance standards in preschool mental health systems may be a relatively new research and policy area, there is a long history of school mental health performance standards and measures in the K-12 school mental health space. This represents an evolution from a focus on bureaucratic processes and liability protection to an articulation of standards. The standards encompass the full continuum of processes, procedures, and practices required for high quality, comprehensive school mental health (Ambrose et al., 2002; Nabors et al., 2003; President’s New Freedom Commission on Mental Health, 2003; Stephan et al., 2007; Stephan et al., 2015).

Recognizing that the quality of school mental health services varied greatly across the United States and that many youth were

unable to access high-quality services (Stephan et al., 2015). The Department of Health and Human Services, Health Resources and Services Administration funded the development of a set of national performance standards for school mental health system quality. As a part of that effort, The National Center for School Mental Health (NCSMH) was tasked to develop the standards and to create an accessible measurement system with which K-12 schools and districts could assess and improve their capacity for delivering high quality school mental health (Connors et al., 2016; Stephan et al., 2015). The standards define how school systems and community mental health programs could collaborate to provide a full continuum of mental health promotion, prevention, and treatment services, emphasizing evidence-based practices and including effective teaming and data-based quality improvement procedures (Connors et al., 2016; Hoover et al., 2019).

Connors and her colleagues (2016) developed national K-12 school mental health performance standards and a companion performance measure using a three-phase method involving literature review and expert consensus, nominal group decision-making, and a modified Delphi process (a group consensus strategy) with school mental health stakeholders. Within the initial phase, a group of expert faculty in the area of school mental health developed a preliminary list of performance standards by reviewing (1) the school mental health quality literature, (2) local, state, and federal frameworks for performance, (3) nationally recognized school mental health performance measures and tools, and (4) nationwide examples of school mental health systems. From this review, they developed a preliminary framework for school mental health performance standards by determining broad domains and associated quality indicators. These domains and quality indicators were refined in the next two phases to create the School Mental Health Quality Assessment (SMH-QA). There are versions for both school-level and district-level teams to assess the comprehensiveness of their school mental health system and to identify areas to prioritize for quality improvement (NCSMH, 2021).

The SMH-QA organizes national performance standards for CSMHS around seven key quality domains, including teaming, needs assessment and resource mapping, mental health screening, mental health promotion (Tier 1), early intervention and treatment (Tiers 2 & 3), funding and sustainability, and impact. These domains represent different elements of the conceptual model of CSMHS. The framework includes a multi-tiered system of support (MTSS) involving programming across levels of support, which increases in dose, specificity, and individualization of services, mental health screening to identify students in need of services, and systems infrastructure and processes (i.e., teaming, needs assessment and resource mapping, funding and sustainability, impact) that coordinate the MTSS (Table 2).

Within each performance standard, specific indicators of quality are delineated (similar to specific quality standards set out by Head Start for *Wellness Promotion* and *Mental Health Consultants*; see Table 1) with detailed “best practice” descriptions illustrating actions a CSMHS would take to embody the quality indicator. For example, within the Early Intervention and Treatment performance standard there are indicators of quality (i.e. ensuring adequate resource capacity to implement interventions, supporting training, identifying and using evidence-informed interventions) and within each indicator there are several best practices to assess each indicator (i.e. evaluate staffing capacity, provide ongoing support for implementation, use resources that center and affirm the identities of individuals from marginalized groups to inform intervention selection). The detailed performance standard offers a well-defined description of what each performance standard should resemble in action. This provides school teams with guidance on how to define the quality of their CSMHS. Defining best practices for preschools may require adaptation to align with preschool resources, staff, and unique contextual factors that are specific to preschool programs.

Content Considerations for Adapting K-12 School Mental Health Performance Standards to Preschool Settings

Family engagement and kindergarten transitions may be important standards to include to better align with the preschool setting, considering the importance of school readiness and family partnerships to high-quality preschool environments (Table 2).

Table 2. *Proposed performance standards for preschool mental health systems and descriptions of each standard with example indicators and best practices*

Performance Standards	Description	Quality Indicator Sample	Best Practice Example
Teaming ^a	Schools are in the position of ensuring that school mental health efforts are appropriately staffed and supported by multidisciplinary teams that have effective communication and collaboration practices. Many schools have teams that meet to discuss and strategize about student mental health issues. Schools may have one team devoted to the full continuum of mental health supports (mental health promotion to early intervention and treatment) or they may have multiple teams that address different parts of the continuum (e.g., school climate team, student support team, Individualized Education Program team, intervention/tertiary care team, Tier 2/3 team, any other team that addresses student mental health concerns). School teams should involve students, families, staff, and community partners that represent diverse cultural identities and back-grounds including diversity of age, disability, ethnicity, gender identity and expression, language, national origin, race, religion, sexual orientation, sex, socioeconomic status. All school teams should prioritize trauma-informed approaches and cultural responsiveness, anti-racism, and equity as they relate to the team’s mission, goals, and deliverables.	Defines staff roles and responsibilities	Clearly defines roles and responsibilities for preschool-employed and community-partnered preschool mental health staff, including early childhood mental health consultant

Needs Assessment/ Resource Mappinga	A needs assessment is a collaborative process used by a system to identify gaps between current and desired conditions and system strengths. It allows a school to identify and address mental health needs that are the most pressing, understand how well existing services and supports are meeting student needs, identify and leverage strengths, and inform priorities and actions for school mental health programming. Resource mapping is an active process to identify, visually represent, and share information about internal and external supports and services to inform effective utilization of resources. The resource map or guide that results from this process is often based on your school's needs assessments and other information about strengths and needs in your school and community. A resource map may also be referred to as an asset map or environmental scan.	Assesses child mental health needs	Use needs assessment tools and processes that are evidence-informed and culturally relevant
Family Engagement	Valuing family voice is key to building strong relationships with families and strong home-school relationships are the priority. Family partnerships have ongoing two-way sharing of information. This information sharing creates spaces that support learning at home and at school. Families know their children and family/community strengths and challenges. This information can improve the usefulness of mental health and socioemotional development programs at school. Preschools can also support families as families support preschools. Preschools can use different types of strategies to engage and support families (e.g. parent training programs, sharing resources reduce caregiver stress, learning about and promoting families' cultural practices around learning). Partnerships should work to create and maintain relationships where staff and families work together. Strong	Meaningfully involves families in decision-making	Take steps to understand how families view their role in their child's education and socioemotional development

relationships will make sure families of all forms (foster care, kinship care, extended families, etc.) feel part of the school community.

Screening ^a	Screening is assessment in the absence of known risk factors to identify supports and interventions (e.g., individual, family, school, community, system interventions) to prevent or address mental health concerns. Screening instruments may assess for individual, family, and community needs and strengths. This can be accomplished with a systematic tool or process, that is culturally relevant for the population, including standardized student-, caregiver-, and/or teacher-report measures, mental health surveillance data, or a structured teacher nomination.	Uses data (through screening or another process) to determine what interventions (Tier 1, 2, and 3) were needed by the children	Use a defined process to review screening and assessment data and match children with appropriate levels of support
Mental Health Promotion ^a	Mental health promotion services and supports (Tier 1) are mental health-related activities that are designed to meet the needs of all students regardless of whether they are at risk for mental health problems. Tier 1 activities include promotion of positive social, emotional, and behavioral skills and well-being. These activities also include efforts to support staff well-being, improve school climate, and promote positive behavior. These activities can be implemented school-wide, at the grade level, and/or at the classroom level and can be provided by school-employed and community-employed, school-based professionals. Examples include school-wide mental health education lessons, school climate improvement efforts, and classroom-based social emotional learning for all students.	Uses classroom and program-wide strategies to build healthy child-teacher and child-child relationships as a foundation for social-emotional development and school readiness	Use effective behavior management practices and classroom lessons to help children manage their emotions and behaviors

Early Determines Intervention and Treatment Services and Supports ^a	<p>Early intervention services and Create an supports (Tier 2) address the mental health concerns of students who are experiencing mild distress, functional impairment, or are at risk for a given problem or concern. These students can be identified through needs assessments, screening, referral, or another school teaming processes. When mental health needs are identified early and culturally responsive, anti-racist, and equitable (CARE) supports are put in place, positive youth development is promoted, and the chronicity and severity of mental health concerns can be eliminated or reduced. Sometimes these are referred to as “selective” mental health “prevention” or “secondary prevention” services. Tier 2 services include services provided by all school-based mental health professionals, school-employed and community-employed.</p> <p>Examples include small group interventions for students identified with similar needs, transition support groups for newcomers, brief individualized interventions (e.g., motivational interviewing, problem solving), mentoring, and/or low intensity classroom-based supports such as a daily report card, daily teacher check-in, and/or home/school note system.</p> <p>Treatment services and supports (Tier 3) to address mental health concerns are provided for students who are already experiencing significant distress and functional impairment. Sometimes these are referred to as “indicated” mental health “intervention”, “tertiary” or intensive services and are individualized to specific student</p>	whether targeted interventions and treatment (Tier 2 and 3) are evidence- informed	intervention selection committee with people from diverse (e.g., parents/ caregivers, preschool and community health and mental health providers, preschool administrators, preschool staff, mental health consultants, home visitors, early intervention providers)
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needs. Tier 3 services include services provided by all school-based mental health professionals, including school-employed and community-employed. Examples include individual, group or family therapy for students receiving general or special education who have identified, and often diagnosed, social emotional and/or behavioral needs.

Funding and Sustainability ^a	Funding and Sustainability refers to strategies to optimize financial and non-financial assets needed to maintain and improve school mental health systems over time. Sustainability is always evolving, but the goal is to ensure that the operational structures and capacity of schools is sound and that schools can evolve and adapt to match the changing needs of students, families, schools, communities, and other systems in your context.	Uses multiple and diverse funding and resources to support interventions across tiers	Establish and use a process to regularly monitor new funding opportunities and local, state, and federal policies that may affect funding for preschool mental health systems
Impact ^a	Impact refers to the long-term effects or changes that occur as a result of the programs, practices, and/or policies implemented within a comprehensive school mental health system. Documenting and reporting the impact of your school mental health system to a wide range of stakeholders is critical for sustainability. By having data on the impact of your school mental health systems readily available and accessible, you will be optimally positioned to describe their success and advocate for ongoing funding, support, and resources, with the support of your district.	Documents the comprehensive preschool mental health system's effectiveness on social, emotional, and behavioral outcomes	Identify existing and potential outcome data (e.g., social/emotional/behavioral health screenings and assessments, behavioral observations, parent, or teacher ratings of social/emotional and behavioral skills, crisis incidents, classroom climate data, strengths

Kindergarten Transitions	Establishing system-level programming geared towards successfully transitioning children to K-12 schools. Using an ecological model to collaborate with families, community partners, and K-12 schools will help establish best practices for moving this field forward and better serving children and families.	Meaningfully involves children in transition	Familiarize children with kindergarten through conversations and stories
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^a Performance standards’ descriptions were reproduced with permission from developers; NCSMH (2021), full descriptions available at <https://www.theshapesystem.com/>

Family Engagement

Parent engagement in preschool is associated with positive social and emotional skills (El Nokali et al., 2010) and academic outcomes (Castro et al., 2015). It is a cornerstone of Head Start programming and considered an important protective factor for children (Wilder, 2014). Broad definitions of parent educational engagement capture the activities parents participate in that support their children’s education and “parental participation in educational processes and experiences of their children (Jeynes, 2007, p. 89).” Including best practices about forming collaborative relationships with families, promoting learning and positive relationships at home, connecting families to additional resources, and creating a welcoming environment for families at the preschool will provide guidance for preschool mental health teams interested in improving their practices and programs related to this key protective factor for young children.

Kindergarten Transition

Smooth transitions to kindergarten can help maintain continuous access to important learning and mental health supports, and prepare children and families to meet the expectations of kindergarten classroom environments. These expectations may include an increased focus on formal learning, differences in child-teacher relationships, and increased structure during the school day.

Although the transition to kindergarten is considered an important time for caregivers and school personnel, what constitutes best practices is still an emerging area of practice and research (Eckert et al., 2008). Rimm-Kaufman and Pianta (2000) described the importance of understanding transitions as a process that involves the whole school community, instead of as a checklist of an individual child's school readiness skills and competencies. Transition policies and practices should center and empower families to guide and participate in the process, which is consistent with preschools' frequent collaborations with caregivers. During this transition process, it is important to tailor strategies to individual families and to take advantage of school and community strengths, including collaboration with kindergarten programs. There are also practical reasons for considering kindergarten transitions within the scope of preschool mental health systems. Aligning language and fostering collaboration with families and K-12 schools may smooth the transition for families between the two care providers. This may be helpful in sustaining gains from preschool.

Conclusion

At present, there is not consensus on national performance standards for preschool mental health. Yet, there continues to be a clear need to improve capacity for systems to ensure that young children are placed on the best mental and behavioral health trajectory possible at the very beginning of their academic careers.

More stable and efficient access to effective prevention, screening, and mental health treatment services will require better investment in and coordination of resources to support early childhood mental health (National Scientific Council on the Developing Child, 2008/2012). Establishing consistent performance standards against which preschools can assess and improve their capacity for delivering comprehensive preschool mental health could be an excellent start. Defining what services and supports quality preschool mental health systems provide and how they sustainably

function is a necessary next step. Considering Head Start and CSMH performance standards, and learning from the implementation of high-quality mental health interventions such as ECMHC and Pyramid model, there is an emerging framework.

If there is consensus around what represents “best practices” in comprehensive preschool mental health and a freely available quality assessment tool comes into common use, community mental health partners interested in collaborating with preschools could better understand where and how their services could meet existing needs. Also, “bright spot” programs who are consistently rated as meeting quality standards could help other preschool sites learn how to improve in quality. Additionally, capacity-building resources could be more strategically allocated based on a site’s needs. Once at-scale, accountability to national performance standards could support and expand the number of high-quality, sustainable preschool mental health programs and demonstrate such programs’ value to promoting young children’s mental health and academic achievement (Connors et al., 2016).

References

- Ambrose, M. G., Weist, M. D., Schaeffer, C., Nabors, L. A., & Hill, S. (2002). Evaluation and quality improvement in school mental health. In H. Ghuman, M. D. Weist, & R. Sarles (Eds.), *Providing mental health services to youth where they are: School- and community-based approaches* (pp. 95 – 110). Brunner-Routledge.
- Angold, A., & Egger, H. L. (2007). Preschool psychopathology: Lessons for the lifespan. *Journal of Child Psychology and Psychiatry*, 48(10), 961-966.
- Benedict, E. A., Horner, R. H., & Squires, J. K. (2007). Assessment and implementation of positive behavior support in preschools. *Topics in early childhood special education*, 27(3), 174-192.
- Brennan, E. M., Bradley, J. R., Allen, M. D., & Perry, D. F. (2008). The evidence base for mental health consultation in early childhood settings: Research synthesis addressing staff and program outcomes. *Early Education and Development*, 19(6), 982-1022.
- Briggs-Gowan, M. J., Carter, A. S., Bosson-Heenan, J., Guyer, A. E., & Horwitz, S. M. (2006). Are infant-toddler social-emotional and behavioral problems transient? *Journal of the American Academy of Child & Adolescent Psychiatry*, 45(7), 849-858.

- Castro, M., Expósito-Casas, E., López-Martín, E., Lizasoain, L., Navarro-Asencio, E., & Gaviria, J. L. (2015). Parental involvement on student academic achievement: A meta-analysis. *Educational Research Review*, 14, 33-46.
- Claussen, A. H., Robinson, L. R., Kaminski, J. W., Charania, S., Holbrook, J. R., So, M., ... & Boyle, C. (2021). Factors associated with self-regulation in a nationally representative sample of children ages 3–5 Years: United States, 2016. *Maternal and Child Health Journal*, 25(1), 27-37.
- Cook, C. R., Lyon, A. R., Locke, J., Waltz, T., & Powell, B. J. (2019). Adapting a compilation of implementation strategies to advance school-based implementation research and practice. *Prevention Science*, 20(6), 914-935.
- Connors, E. H., Stephan, S. H., Lever, N., Ereshefsky, S., Mosby, A., & Bohnenkamp, J. (2016). A national initiative to advance school mental health performance measurement in the US. *Advances in School Mental Health Promotion*, 9(1), 50-69.
- Dekker, M. C., Ferdinand, R. F., Van Lang, N. D., Bongers, I. L., Van Der Ende, J., & Verhulst, F. C. (2007). Developmental trajectories of depressive symptoms from early childhood to late adolescence: gender differences and adult outcome. *Journal of Child Psychology and Psychiatry*, 48(7), 657-666.
- Doll, B., Brehm, K., Zucker, S., Deaver-Langevin, J., Griffin, J., & Hickman, A. (2000). Contrasting procedures for empirical support of traditional and population-based mental health services. *Psychology in the Schools*, 37(5), 431-442.
- Dunlap, G., Wilson, K., Strain, P., & Lee, J. (2013). *Prevent-teach-reinforce for young children*. Brookes Publishing.
- Early Childhood Learning & Knowledge Center (n.d). *1302.45 child mental health and social and emotional well-being*. <https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xiii/1302-45-child-mental-health-social-emotional-well-being>
- Eckert, T. L., McIntyre, L. L., DiGennaro, F. D., Arbolino, L., Begeny, J., & Perry, L. J. (2008). Researching the transition to kindergarten for typically developing children: A literature review of current processes, practices, and programs. In D. H. Molina (Ed.), *School psychology: Twenty-first century issues and challenges* (pp. 235-252). Hauppauge, NY: Nova Science.
- Egger, H. L., & Angold, A. (2006). Common emotional and behavioral disorders in preschool children: Presentation, nosology, and epidemiology. *Journal of child psychology and psychiatry*, 47(3-4), 313-337.
- Egger, H. L., Erkanli, A., Keeler, G., Potts, E., Walter, B. K., & Angold, A. (2006). Test-retest reliability of the preschool age psychiatric assessment (PAPA). *Journal of the American Academy of Child & Adolescent Psychiatry*, 45(5), 538-549.

- Eisenberg, N., Spinrad, T. L., & Eggum, N. D. (2010). Emotion-related self-regulation and its relation to children's maladjustment. *Annual Review of Clinical Psychology*, 6(1), 495–525.
- El Nokali, N. E., Bachman, H. J., & Votruba-Drzal, E. (2010). Parent involvement and children's academic and social development in elementary school. *Child Development*, 81(3), 988-1005.
- Feeney-Kettler, K. A., Kratochwill, T. R., Kaiser, A. P., Hemmeter, M. L., & Kettler, R. J. (2010). Screening young children's risk for mental health problems: A review of four measures. *Assessment for Effective Intervention*, 35(4), 218-230.
- Feigenberg, L. F., Watts, C. L., & Buckner, J. C. (2010). The school mental health capacity instrument: Development of an assessment and consultation tool. *School Mental Health*, 2(3), 142-154.
- Foreman, D. (2015). The psychiatry of children aged 0–4: advances in assessment, diagnosis and treatment. *BJPsychAdvances*, 21, 377–386.
- Fox, L., Dunlap, G., Hemmeter, M. L., Joseph, G. E., & Strain, P. S. (2003). The teaching pyramid: A model for supporting social competence and preventing challenging behavior in young children. *Young Children*, 58, 48–52.
- Fox, L., & Hemmeter, M. L. (2009). A program-wide model for supporting social emotional development and addressing challenging behavior in early childhood settings. In *Handbook of positive behavior support* (pp. 177-202). Springer, Boston, MA.
- Ghandour, R. M., Hirai, A. H., Moore, K. A., Robinson, L. R., Kaminski, J. W., Murphy, K., Lu, M. C. & Kogan, M. D. (2021). Healthy and Ready to Learn: Prevalence and Correlates of School Readiness among United States Preschoolers. *Academic Pediatrics*, 21(5), 818-829.
- Ghandour, R. M., Moore, K. A., Murphy, K., Bethell, C., Jones, J. R., Harwood, R., ..., Lu, M. (2019). School readiness among U.S. children: Development of a pilot measure. *Child Indicators Research*, 12(4), 1389–1411.
- Green, B. L., Everhart, M., Gordon, L., & Garcia Gettman, M. (2006). Characteristics of effective mental health consultation in early childhood settings: Multilevel analysis of a national survey. *Topics in Early Childhood Special Education*, 26(3), 142-152.
- Heckman, J.J. (2012). The case for investing in young children. In B. Falk (Ed.), *Defending childhood: Keeping the promise of early education* (pp. 235–242). Teachers College Press.
- Hemmeter, M. L., Ostrosky, M., & Fox, L. (2006). Social and emotional foundations for early learning: A conceptual model for intervention. *School Psychology Review*, 35, 583–601.

- Hepburn, K. S., Kaufmann, R. K., Perry, D. F., Allen, M. D., Brennan, E. M., & Green, B. L. (2007). *Early childhood mental health consultation: An evaluation tool kit*. Georgetown University, Technical Assistance Center for Children's Mental Health; Johns Hopkins University, Women's and Children's Health Policy Center; and Portland State University, Research and Training Center on Family Support and Children's Mental Health.
- Herman, K. C., Reinke, W. M., Thompson, A. M., M. Hawley, K., Wallis, K., Stormont, M., & Peters, C. (2020). A public health approach to reducing the societal prevalence and burden of youth mental health problems: Introduction to the special issue. *School Psychology Review*, 50(1), 8-16.
- Hoover, S., Lever, N., Sachdev, N., Bravo, N., Schlitt, J., Acosta Price, O., et al. (2019). *Advancing comprehensive school mental health: Guidance from the field*. National Center for School Mental Health. University of Maryland School of Medicine.
- Jensen, P. S., Goldman, E., Offord, D., Costello, E. J., Friedman, R., Huff, B., ... & Roberts, R. (2011). Overlooked and underserved: "Action signs" for identifying children with unmet mental health needs. *Pediatrics*, 128(5), 970-979.
- Jeynes, W. H. (2007). The relationship between parental involvement and urban secondary school student academic achievement: A meta-analysis. *Urban Education*, 42(1), 82-110.
- Keenan, K., Shaw, D., Delliquadri, E., Giovannelli, J., & Walsh, B. (1998). Evidence for the continuity of early problem behaviors: Application of a developmental model. *Journal of Abnormal Child Psychology*, 26(6), 441-452.
- Kelleher, K. J., McInerney, T. K., Gardner, W. P., Childs, G. E., & Wasserman, R. C. (2000). Increasing identification of psychosocial problems: 1979-1996. *Pediatrics*, 105(6), 1313-1321.
- Lieberman, A.F., Barnard, K.E., & Wieder, S. (2004) Diagnosing infants, toddlers, and preschoolers: The Zero to Three diagnostic classification of early mental health disorders. In R. DelCarmen-Wiggins, & A. Carter (Eds.), *Handbook of infant, toddler, and preschool mental health assessment* (pp. 141-160). Oxford University Press.
- McGough, J. J., & Barkley, R. A. (2004). Diagnostic controversies in adult attention deficit hyperactivity disorder. *American Journal of Psychiatry*, 161(11), 1948-1956.
- Merikangas, K. R., He, J. P., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., ... Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: Results from the National Comorbidity Survey Replication-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(10), 980-989.

- Nabors, L. A., Lehmkuhl, H. D., & Weist, M. D. (2003). Continuous quality improvement and evaluation of expanded school mental health programs. In M. D. Weist, S. W. Evans, & N. A. Lever (Eds.), *Handbook of school mental health: Advancing practice and research* (pp. 275– 284). New York, NY: Springer
- National Association for the Education of Young Children (n.d). *The 10 NAEYC program standards*. <https://www.naeyc.org/our-work/families/10-naeyc-program-standards>
- National Center for School Mental Health (2021). School Mental Health Quality Assessment – School Version. Retrieved from https://shape.3cimpact.com/api/resources/file/public/SMHQA_School%20version.pdf
- National Center for School Mental Health (2019). School Mental Health Quality Assessment – School Version. Retrieved from https://www.theshapesystem.com/wp-content/uploads/2021/07/SMHQA_school-7.7.21.pdf
- National Scientific Council on the Developing Child. (2008/2012). *Establishing a Level Foundation for Life: Mental Health Begins in Early Childhood: Working Paper 6*. Updated Edition. <http://www.developingchild.harvard.edu>
- Owens, J. S., Lyon, A. R., Brandt, N. E., Warner, C. M., Nadeem, E., Spiel, C., & Wagner, M. (2014). Implementation science in school mental health: Key constructs in a developing research agenda. *School Mental Health*, 6(2), 99-111.
- Perry, D. F., Allen, M. D., Brennan, E. M., & Bradley, J. R. (2010). The evidence base for mental health consultation in early childhood settings: A research synthesis addressing children's behavioral outcomes. *Early Education and Development*, 21(6), 795-824.
- President's New Freedom Commission on Mental Health. (2003). *Achieving the promise: Transforming mental health care in America. Final Report*. US Dept of Health and Human Services.
- Rimm-Kaufman, S. E., & Pianta, R. C. (2000). An ecological perspective on the transition to kindergarten: A theoretical framework to guide empirical research. *Journal of Applied Developmental Psychology*, 21 (5): 491–511.
- Ros, R., & Graziano, P. A. (2019). A transdiagnostic examination of self-regulation: Comparisons across preschoolers with ASD, ADHD, and typically developing children. *Journal of Clinical Child & Adolescent Psychology*. 49(2), 1-16. <https://doi.org/10.1080/15374416.201>
- Shaw, D.S., Gilliom, M., Ingoldsby, E.M. & Nagin, D.S. (2003). Trajectories leading to school-age conduct problems. *Developmental Psychology*, 39(2), 189-200.
- Shepley, C., & Grisham-Brown, J. (2019). Multi-tiered systems of support for pre-school-aged children: A review and meta-analysis. *Early Childhood Research Quarterly*, 47, 296-308.

- Steed, E. A., Pomerleau, T., Muscott, H., & Rohde, L. (2013). Program-wide positive behavioral interventions and supports in rural preschools. *Rural Special Education Quarterly*, 32(1), 38-46.
- Stephan, S. H., Connors, E., & Blizzard, A. M. (2015). Improving quality in school mental health. *Advances in School Mental Health Promotion*, 8(3), 121-123.
- Stephan, S. H., Weist, M., Kataoka, S., Adelsheim, S., & Mills, C. (2007). Transformation of children's mental health services: The role of school mental health. *Psychiatric Services*, 58(10), 1330-1338.
- The National Assembly on School Based Health Care. (2008). Mental health planning and evaluation template. Retrieved from <http://www.nasbhc.org/atf/cf/{CD9949F2-2761-42FB-BC7A-CEE165C701D9}/MHPET.pdf>
- Tremblay, R. E., Nagin, D. S., Seguin, J. R., Zoccolillo, M., Zelazo, P. D., Boivin, M., ... & Japel, C. (2004). Physical aggression during early childhood: Trajectories and predictors. *Pediatrics*, 114(1), e43-e50.
- Volkmar, F. R., Lord, C., Bailey, A., Schultz, R. T., & Klin, A. (2004). Autism and pervasive developmental disorders. *Journal of Child Psychology and Psychiatry*, 45(1), 135-170.
- Weist, M. D., Sander, M. A., Walrath, C., Link, B., Nabors, L., Adelsheim, S., ... Carrillo, K. (2005). Developing principles for best practice in expanded school mental health. *Journal of Youth and Adolescence*, 34, 7-13.
- Weist, M. D., Stephan, S., Lever, N., Moore, E., & Lewis, K. (2006). *The school mental health quality assessment questionnaire*. Baltimore, MD: Center for School Mental Health Analysis and Action. University of Maryland.
- Wilder, S. (2014). Effects of parental involvement on academic achievement: a meta-synthesis. *Educational Review*, 66(3), 377-397.