Universal Mental Health Screening in Schools: A Primer for Principals

[1]Brandon J. Wood, [2]Kellie R. Cooper-Secrest, [3]Megan Kirk and [4]Sally Walter

The majority of school-age children with or displaying characteristics of a mental health disorder do not independently seek help, often go undiagnosed or undetected, and fail to receive treatment or intervention leaving them susceptible to and at risk for poor school and life outcomes. In response to these concerns and in an effort to improve the proactive identification of students in need of or requiring support, schools have been encouraged to implement preventative practices, such as the conducting of universal mental health screening (UMHS). Despite the documented benefits of UMHS and implications of conducting UMHS in readily pairing at-risk students with appropriate treatment, intervention, or services, the majority of schools, historically, have not engaged in UMHS instead opting for more reactive approaches to dealing with student mental health needs. Principals are key stakeholders in determining whether preventative practices, like the conducting of UMHS, are implemented, and they may serve as a barrier to school mental health service expansion and provision. In response to recently published survey data where the majority principals, on average, reported no or slight knowledge about UMHS but moderate or extreme levels of interest in their school beginning to conduct UMHS, the current paper primarily sought to (a) improve principal knowledge about UMHS, (b) equip principals with resources about UMHS, and (c) review important considerations in UMHS implementation. Increasing principal awareness of, exposure to, and knowledge about UMHS may assist in narrowing the research to practice gap that presently exists.
Keywords: Mental Health, Universal Screening, Principals, Prevention

Corresponding Author:

[1]Brandon J. Wood, Ph.D., NCSP
Assistant Professor, School Psychology Program, University of Toledo
College of Health and Human Services, School of Intervention & Wellness
419-530-4772, Brandon.wood2@utoledo.edu, ORCID 0000-0001-7557-9027

Co-Authors:

[2]Kellie R. Cooper-Secrest
Department of Educational Psychology, Teachers College, Ball State University, Muncie, IN

[3]Megan Kirk, Ph.D.
Vigo County School Corporation, Terre Haute, IN

[4]Sally Walter, Ph.D.
Psychology Department, College of Arts and Sciences, Indiana State University, Terre Haute, IN

Universal Mental Health Screening in Schools: A Primer for Principals

The mental health of school-age children has been and continues to be a nationwide concern. Approximately one in five children and one in three young adults experience mental health difficulties (Belfer, 2008; Costello et al., 2003; Merikangas et al., 2010; Whitney & Peterson, 2019; World Health Organization, 2014) and prevalence estimates, across various subgroups, continue to rise (Centers for Disease Control and Prevention, 2019). At least half of all mental health disorders are thought to onset by adolescence with the most chronic, debilitating conditions originating during earlier developmental years (Goodman-Scott et al., 2019; Kessler et al., 2005). Unfortunately, the overwhelming majority of school-age children with or displaying signs of a mental health disorder go undiagnosed and fail to receive treatment or intervention (Merikangas et al., 2011; Murphey et al., 2013; Ringel & Sturm, 2001; Whitney & Peterson, 2019). Lacking early detection and treatment or intervention, students presenting mental health concerns are at increased risk for poor school (e.g., academic underachievement, retention, dropout, etc.) and life outcomes (e.g., suicidal ideation and attempts, substance use, employment, etc.) (Bradley et al., 2008; Dowdy et al., 2012; O'Connell et al., 2009).

Most school-age children do not independently seek help or support for psychological concerns (Christiana et al., 2000; Robinson et al., 2011). Therefore, it's incumbent upon affiliated stakeholder groups, such as schools, the largest provider and preferred venue of mental health services (Dever & Raines, 2013; Huskey et al., 2011), to assist in the identification and subsequent response of the needs of students demonstrating symptoms or displaying characteristics of mental health disorders. One best practice, research recommended, population-level approach schools have routinely been encouraged to adopt to aid in proactively identifying students in need of support, treatment, or intervention is universal mental health screening ([UMHS]; Dever et al., 2015; Dowdy et al., 2010).

UMHS involves all students in a school, regardless of their risk status, being screened for specific criteria (i.e. characteristics of well-being or mental health indicators) using brief, reliable, and valid tools or measures (i.e. rating scales) to (a) determine individual strengths and needs and (b) identify those who may require preventative, targeted, or intensive services and support (i.e. multitiered systems of support [MTSS]) (Eklund & Dowdy, 2014; Essex et al., 2009; Goodman-Scott et al., 2019). Although schools have grown accustom to universally screening for students' academic needs (Schwean & Rodger, 2013), most schools have not begun conducting UMHS (Bruhn et al., 2014; Dineen et al., 2021; Romer & McIntosh, 2005; Wood & McDaniel, 2020).

Principals often serve as gatekeepers in determining whether preventative practices, such as UMHS, are implemented (Han & Weiss, 2005; Kam et al., 2003). Researchers have previously expressed concern about principal training in and about student mental health (Koller & Bertel, 2006) and report principals may serve as a barrier to school mental health service expansion and provision (Weist & Paternite, 2006). Therefore, the lead author recently conducted a statewide survey of principals (Wood & McDaniel, 2020) to (a) learn whether their school conducts UMHS, (b) better understand their interest in and knowledge about UMHS, (c) and discover perceived barriers to the conducting of UMHS.

In summary, 248 principals completed the survey. Nearly 99% of respondents reported their school does not actively conduct UMHS, and 87% reported they were not aware mental health

screening tools existed. The majority of principals in schools not conducting UMHS reported no or slight knowledge about UMHS but moderate or extreme levels of interest in their school beginning to conduct UMHS. Principals reported the top five barriers to conducting UMHS as follows: (1) no access to mental health screeners, (2) not enough money in the budget, (3) unawareness mental health screeners exist, (4) no support system in place to help identified students and (5) not enough time. These results, along with other research highlighting the need for additional attention to and training in mental health within principal preparation training programs (Koller & Bertel, 2006), inspired us to write this article in an effort to (a) increase principal knowledge about UMHS, (b) equip principals with resources to entertain conducting UMHS within their schools and overcome commonly reported barriers to UMHS expansion (when and where appropriate), and (c) address important considerations when approaching UMHS implementation.

Goals of UMHS

Consistent with the MTSS initiative and the ongoing movement toward and emphasis placed on data-based decision-making (Doll & Cummings, 2008), the overarching goal of UMHS is proactive identification and subsequent treatment/intervention of at-risk students, especially those who would otherwise go undetected, with or presenting characteristics of mental health disorders using diagnostically reliable and developmentally appropriate screening tools (Center for School Mental Health, 2018; Dowdy et al., 2015). Screening data are "considered in conjunction with other universal data such as attendance, grades, curriculum-based measures, and suspensions/expulsions to identify a student's need for intervention and match the necessary level of support" (Splett et al., 2018, p. 346). UMHS holds the potential to not only flag individuals with known externalizing concerns (e.g., hyperactivity, aggressiveness, non-compliance, disruptiveness, etc.) but also students who experience or have symptoms of internalizing mental health disorders (e.g., anxiety, withdrawal, depression, etc.) who are less disruptive and detectable by adult caregivers and overwhelmingly underserved in K-12 school settings (Merikangas et al., 2011; Weist et al., 2007). Traditional approaches to student mental health within educational settings have mostly been reactive (e.g., student accumulation of office discipline referrals signaling need for help or support) resulting in missed opportunities or significant delays in students, especially those presenting with internalizing complications, accessing treatment/intervention (Dowdy et al., 2010; Lane et al., 2012). Conducting UMHS can help increase the odds students, following identification, access necessary support before symptoms become less amenable to treatment (Albers et al., 2007; Prochaska et al., 2016). Other goals of UMHS, as outlined by the Center for School Mental Heath (2018), include: (a) educating staff about mental health and the early warning signs of disorders, (b) engaging parents in practices and through conversations to help support student social-emotional well-being, (c) reducing the societal stigma surrounding mental health, (d) cultivating community-based mental health partnerships and systems of support, and (e) determining the effectiveness of Tier 1 social-emotional curricula.

The "S" in UMHS

Complete mental health "is defined by average to high levels of subject well-being (SWB) and low levels of psychopathology" (Suldo et al., 2016, p. 436). These "dual factors" (i.e., high/low levels of psychological problems and high/low levels of well-being) form the basis of and create

the platform for contemporary approaches to UMHS whereby either one or the coadministration of two or more measures are used with "at least one measure focused on symptoms of distress and another focused on the presence of strength indicators" (Dowdy et al., 2018, p. 241). These measures, or screening tools, can be completed by student self-report, teachers, parents, or a combination of informants. Historically, a deficits-based approach has been utilized (i.e., screening only for presence or absence of psychological distress). The contemporary, complete mental health screening approach that is advocated for in schools is generally more socially acceptable and has potential benefits for all students (e.g., resilience building, strengths cultivation, protective factor identification, etc.), which greatly enhances the implementation appeal and may aid in stakeholder buy-in (Renshaw et al., 2014).

When screening for students' complete mental health, results may place any given student within one of four groups, as described by Dowdy et al. (2018): "(1) high symptoms of distress and low strengths (i.e., troubled), (2) low symptoms of distress and high strengths (i.e., flourishing – complete mental health), (3) high symptoms of distress and high strengths (i.e., symptomatic but content), and (4) low symptoms of distress with low strengths (i.e., languishing)" (p. 242). Theoretically, students within the low symptom and high strengths group would not require intervention; they would likely continue to benefit from Tier 1 universal support and instruction. Students in each of the three other groups "may benefit from or require additional services" (Moore et al., 2019, p. 261), with students falling within the high symptoms of distress and low strengths group requiring the most immediate attention and intensive, individualized support. Prior study results may aid schools in preparing for how many students may fall into each group categorization. On average, approximately 13-21% of students can be expected to be within an at-risk group, with 5-11% presenting severe impairments requiring immediate follow-up (Burns et al., 1995; Merikangas et al., 2010).

Screening Tools

Determining which screening tool(s) to use is not an easy task and likely depends on a number of factors including but not limited to the school's purpose for conducting UMHS, allocated screening budget, time, and predetermined informant(s). At minimum, the selected screening instrument(s) should reflect characteristics of the student population and be developmentally appropriate, valid, and reliable (Dever et al., 2012; Glover & Albers, 2007; Weist et al., 2007). A review all available screening instruments is beyond the scope of this article, so several popular school-based screening tools commonly cited in the literature, along with helpful links, are offered below.

One of the most popular screening measures for school-based use is the Behavioral and Emotional Screening System (*BESS*; Kamphaus & Reynolds, 2007). The *BESS* is quick to administer, reliable, and measures both social-emotional strengths and weaknesses (Jenkins et al., 2014). Several researchers (e.g., Dowdy et al., 2015; Splett et al., 2018) recently used the *BESS* in their studies focused on mental health screening of student populations. Other commonly reported and popular screening measures include the Strengths and Difficulties Questionnaire (*SDQ*), Pediatric Symptom Checklist, Columbia Suicide Screen (*CSS*), Student Risk Screening Scale – Internalizing and Externalizing (*SRSS-IE*), Systematic Screening for Behavioral Disorders (*SSBD*), Social Skills Improvement System – Screening Guide (*SSiS-PSG*), the Social and Emotional Health Survey (*SEHS*) and the Screen for Child Anxiety Related Emotional Disorders

(*SCARED*). A comprehensive compilation of information, including presentation materials and videos, pertaining to the *BESS*, *SDQ*, *SRSS-IE*, *SSBD*, and *SSiS-PSG* can be found using the following link: http://www.ci3t.org/screening. Information about the *SEHS*, a strength-based screening tool, is accessible at https://www.covitalityucsb.info/sehs-measures/index.html. One free platform (sign up required) sponsored by the National Center for School Mental Health that offers information about screening measures available for consideration is the School Health Assessment and Performance Evaluation System (SHAPE). The SHAPE screening and assessment library can be accessed here: https://www.theshapesystem.com/assessmentlibrary/.

For readers interested in learning more about school-based screening tools, including those not mentioned or discussed in the preceding paragraph, the following articles are recommended. Jenkins and colleagues (2014) offer a critical review of five school-based mental health screening tools, including: *BESS*, *SDQ*, *SSBD*, *SSiS-PSG*, and the Behavior Intervention Monitoring Assessment System (*BIMAS*). Levitt and colleagues (2007) list more than 20 screening tools, provide information about their use, and offer data about each tool's reliability and validity. Articles by Deighton et al. (2012), Moore et al. (2015), and Severson et al. (2007) also review common school-based screening measures that have the potential to aid in screening tool selection. Finally, for schools interested in screening but operating on extremely tight budgets, Florell (2014) discusses and provides information about free, diagnostically reliable social-emotional, behavioral, and mental health screeners suitable for school use, while Beidas and colleagues (2015) offer a compilation of standardized instruments for low-resource settings.

UMHS Implementation

Systems-level change efforts, such as the initial exploration and eventual conducting of UMHS, are often arduous to navigate, slow to realize, and require strong building-level leadership (Castillo & Curtis, 2014; Eagle et al., 2015; Fixsen et al., 2005). Principals are customarily charged with organizing and leading systems-change initiatives, articulating and routinely communicating a shared vision, distributing leadership opportunities in change activities, and leveraging the expertise of various discipline groups to help guide decision making (Eagle et al., 2015; Waldron & McLeskey, 2010). Until recently, little to no implementation guidance for the conducting of UMHS was widely available in the literature, with approximately half of all states issuing no guidance to schools at all (Briesch et al., 2017). A ***very brief overview*** of a stepwise approach to UMHS is discussed and implementation resources are offered below.

Securing stakeholder buy-in, generating readiness, and creating a UMHS team are initial steps towards the conducting of UMHS. Using already collected data to justify the need for UMHS, drawing parallels to how the conducting of UMHS compliments other school initiatives, and providing professional development on the topic of UMHS are several strategies that can be used to generate buy-in from teachers, staff, and parents (Center for School Mental Health, 2018). As buy-in is being secured, allies and proponents of UMHS within schools should be identified and those individuals should be considered for membership on the UMHS team.

Principals are vital members of the UMHS team, and they should be knowledgeable about and heavily involved in the UMHS scaling-up process (O'Connor & Freeman, 2012). Other valuable UMHS team members include school counselors, school psychologists and general and special education educators. Once formed, team responsibilities can be assigned, and objectives of the team can begin being discussed. The National Center for School Mental Health (2020) offer a

downloadable resource to assist in delegating responsibilities and assigning member roles, which is accessible at **https://tinyurl.com/y2ly2vcb**.

Initial activities of the UMHS team include determining the purposes of UMHS, identifying resources, and discussing logistics. Arrival of team consensus of what information is desired as a result of conducting UMHS can assist in initial identification of UMHS purpose. Some UMHS teams may want to take a broad approach to screening (e.g., screen for variety of concerns or strengths) while other teams may want to take a narrower approach (e.g., screen only for student depression symptoms). Regardless of what the team determines are the purposes for conducting of UMHS, outcome variables for measuring impact should be decided at this stage (Center for School Mental Health, 2018). Resource identification and management is also an initial activity of the UMHS team. This team activity involves taking inventory of resources the school already has in place to support students identified as needing targeted or intensive services (i.e., what intervention systems does the school already have) and determining what resources are still required. Principals may lead conversations about resource allocation and management given their knowledge of and specific responsibility for managing the school's daily operations. To aid teams in identifying and taking inventory of resources, the National Center for School Mental Health (2020) offers resource mapping and needs assessment information and assistance (http://www.schoolmentalhealth.org/media/SOM/Microsites/NCSMH/Documents/Quality-Guides/Needs-Assessment-&-Resource-Mapping-2.3.20.pdf) including a downloadable gap analysis worksheet (https://dm0gz550769cd.cloudfront.net/shape/89/89d81d363e9b4dbe1e914b508b6f9d10.pdf). Team determination of UMHS logistics is the next initial team step. Important logistical considerations to be addressed by the UMHS team include but are not limited to: (a) screening timeline and frequency, (b) who will complete the screener and where, (c) how will the screening data be managed and by whom, and (d) what budget is in place or accessible for screening materials. After the initial activities are satisfactorily addressed, the UMHS team can begin reviewing screening instruments.

Selecting a screening tool or tools that match the UMHS team's objectives is imperative. An understanding of budget restrictions, broad- versus narrow-band limitations, availability of time, reliability and validity data, and who will be completing the screening tool(s) will greatly assist in quickly arriving at options. Team members may independently investigate options and compare and contrast findings that meet team objectives to assist in screening tool selection. As previously mentioned, regardless of UMHS team's objectives, the screening tool should reflect characteristics of the student population and be developmentally appropriate, valid, and reliable (Dever et al., 2012; Glover & Albers, 2007; Weist et al., 2007).

Following the selection of a screening instrument or instruments, it is important for the UMHS team to set guidelines for how data will be collected and interpreted (i.e., what scores indicate moderate or extreme risk, what scores will necessitate immediate follow-up, etc.) before initiating data collection. Progress monitoring systems should also be established for students flagged for and eventually paired with intervention and supports. Finally, the UMHS team should consider creating a plan for disseminating screening and progress monitoring results.

Dissemination data can highlight the importance of UMHS, be used to show how students are progressing, and aid in the reduction of stigma surrounding mental health.

Once all initial steps have been completed, UMHS teams may choose to pilot their screening tool and plan before full school-level implementation. A pilot test of procedures may be most beneficial in schools who have never conducted UMHS. Regardless of whether a pilot is used, service providers should be contacted immediately before any screening event in anticipation of their need. Data should be interpreted quickly but with caution (i.e., potential false positive) and students in immediate need of support should be connected with resources. When screening results are in question, an additional round of screening (i.e., different screening tool) may be necessary to rule in or out over- or under-identification.

Several easily accessible implementation resources exist to support schools and UMHS teams. Romer and colleagues (2020) offer a recently revised implementation guide that also includes an implementation checklist accessible at https://tinyurl.com/UniversalMHScreening. Eklund and Rossen (2016) created a resource on trauma screening in schools downloadable at https://www.nasponline.org/x37269.xml, which includes an appendix containing screening measures for consideration. Finally, the Ohio Department of Education (2016) and the Substance Abuse and Mental Health Services Administration (2019) both have created resources to support school-based social, emotional, and mental health screening, which are accessible using the following links, respectively: https://tinyurl.com/ScreeningGuidance and https://tinyurl.com/ReadySetGoScreening.

Important UMHS Implementation Considerations

Along the pathway toward conducting UMHS, teams and schools face many challenging questions. Questions about informed consent procedures, confidentiality of student information, selecting the most appropriate screening informant, and how often and where screening should transpire undoubtedly must be addressed. A review and short summarization addressing each of these topics is offered below. Readers interested in additional information on each of these topics are encouraged to review the implementation guidance resources in the preceding section.

Informed Consent

Debates about informed consent procedures are not uncommon. Informed consent can be achieved one of two ways: actively or passively. Active consent requires a student's parent(s) or legal guardian(s) to give permission before a student can be included in the screening activity, while passive consent requires schools to offer notification of intent to screen and students are not included in the screening activity only in instances where parents or legal guardians opt their child out of being screened (Lane et al., 2012). Active consent is typically favored, especially in instances of students serving as screening informants (i.e., self-report) (Eklund & Kilgus, 2015), but some districts / schools have had success utilizing a passive consent approach (Center for School Mental Health, 2018). Passive consent may be viewed more favorably given research suggesting active consent approaches may lead to decreased participation, especially from higher risk groups (Chartier et al., 2008). At minimum, informed consent materials should be clearly communicated to parents and guardians and record keeping procedures should be established (Weist et al., 2007). Consultation with a district or school attorney may also be advisable prior to arriving at any informed consent procedural decision.

Confidentiality of Screening Data

Confidentiality of screening data must be appropriately ensured and limits to confidentiality must be clearly shared within the scope of obtaining informed consent/assent. During the planning process, schools should consider which individuals will have access to the screening data, including, but not limited to building leadership teams, families, and education and mental health professionals. It is important to consider the plan for sharing the screening information with student guardians as well as connecting the student to further assessment and/or treatment.

Who Completes the Screener?

Deciding on an informant or informants can be difficult process and likely depends on a number of factors (e.g., student characteristics, screening purposes, time, etc.). Many screening instruments have forms that would allow for multiple informants (i.e., student self-report, parent report, teacher report). Each informant can potentially provide valuable information, which can complicate the decision-making process.

When developmentally appropriate, student informants may be considered. Student self-reports have been found to be more reliable than other informant (teacher, parent) reports (Logan & King, 2002). If the UMHS team is primarily focused on or interested in best understanding risk for internalizing symptoms, student self-report is the best option (Dowdy & Kim, 2012). If student self-report is sought, the possibility of electronic screening (e-screening) should be entertained, as e-screening for students may result in increased rates of student self-disclosure (Bradford & Rickwood, 2015).

Parents and teachers are also suitable screening informants, especially if the UMHS team is interested in learning more about student risk for externalizing disorders (Jeuchter, 2012; Loeber et al., 1991). Historically, teacher ratings of student externalizing behavior have been more reliable, across school levels, compared to parent informants (Jeuchter, 2012; Taylor et al., 2000). When multiple informants can be utilized, it is likely best to have students serve as at least one of those informants, as research conducted by De Los Reyes and colleagues (2015) suggests relationships between parent and teacher ratings may be relatively low.

Supporting Informants.

Before any screening occurs, it is important for the UMHS team to ensure all informants or informant groups understand the purposes for screening and how to appropriately complete the selected screening instrument(s). Recent work by von der Embse and colleagues (2018) highlights the importance of training before screening instrument completion. Following their piloted training program, "trained teachers reported higher levels of acceptability, feasibility, independence of use, and understanding of universal screening" (p. 380). In addition to offering adequate training opportunities, UMHS teams may afford prospective informants an opportunity to review or practice completing the screening instrument. Informant questions about the screening instrument, including its items or response options, can be addressed at this time. Absent appropriate training and support, the validity and usefulness of screening data may be compromised (von der Embse et al., 2018).

Screening Frequency

Scholars with expertise on UMHS suggest screening should typically occur two or three times per academic year (Parisi et al., 2014; Romer et al., 2020; Walker, 2010; Walker et al., 2014).

More than one screening occasion per academic year is necessary to monitor student response to Tier 1 instruction (Romer et al., 2020) and to identify newly, previously unidentified symptomatic students requiring support (Walker et al., 2014). When to screen at the beginning of the academic year likely requires the most significant consideration, primarily if teachers serve as informants and they are interacting with a new group of students. The second screening occurrence can happen prior to or soon after winter intercession, while the final screening occurrence should transpire towards the end of the academic year but early enough to allow for identified students to receive support (i.e., treatment, intervention).

Screening Location

When screening occurs within schools, informant privacy is a necessary condition. An informant's perception of privacy can influence their responses, which potentially jeopardizes the validity of screening results (Fan et al., 2006). If groups of student informants are completing screeners simultaneously, private places and appropriate social distancing between respondents can help protect against breaches of confidentiality. If student informants can complete the screener online from a mobile device, they may be willing to answer truthfully without worry that others may see their responses. Discussing screening locations or modalities prior to implementation is vital to ensure students feel their responses are confidential and protected. It may be worth discussing the screening process with student representatives to understand their perceptions of the proposed process so potential issues can be addressed proactively.

Addressing Barriers to UMHS Expansion

The barriers preventing the expansion of UMHS reported by principals should not be dismissed or overlooked, given their pivotal role in determining the extent preventative mental health initiatives, within schools, are adopted (Kam et al., 2003). Some of the most commonly reported barriers, such as budgetary concerns (i.e., screener cost) and awareness of and access to screening instruments, are likely easier to overcome and address than others (e.g., lack of resources and support system, time, etc.). Three of the top five most commonly reported barriers reported by principals in the study by Wood and McDaniel (2020) appear to thematically group together and conceivably impact one another.

At least some variance explaining why principals report a lack of awareness mental health screening instruments exist could hypothetically be explained by lack of preparatory training in MTSS, special education, and/or student social-emotional well-being. Regardless of the reason(s) why principals, on average, report little to no knowledge about UMHS and the existence of behavioral, social-emotional, and mental health screening instruments, improvements in awareness likely will ease or assist in offsetting their concerns about screener access (#1 reported concern) and screening cost (#2 reported concern). Independently reviewing resources (i.e., implementation guides) and seeking out professional development opportunities on the topic of UMHS will undoubtedly increase awareness and improve knowledge. School psychologists may be one candidate principals may look towards to offer school-wide professional development on the topic of UMHS and/or MTSS (see Fernandez & Vailancourt (2013) for review of how to maximize school psychologists in meeting students' mental health needs).

With improved awareness of and knowledge about UMHS likely comes acknowledgment that many screening instruments exist, are readily accessible, and in some circumstances are even free to use. Table 1 lists and provides links to information about free screening tools discussed by

Florell (2014). Within the "screening tools" section earlier in the article exists additional suggested readings that discuss and, in some instances, provide thorough reviews (i.e., cost, purpose, reliability) of screening instruments.

Table 1

Screening Instruments

Instrument Name	Area(s) Assessed/link
Pediatric Symptoms Checklist (PSC)	Attention, Internalizing and Externalizing Concerns
Revised Child Anxiety and Depression Scale	Anxiety, Depression
Kutcher Adolescent Depression Scale	Depression
Center for Epidemiological Studies Depression Scale for Children	Depression
Self-Report for Childhood Anxiety Related Disorders (SCARED)	Anxiety
Spence Children's Anxiety Scale (SCAS)	Anxiety
NICHQ Vanderbilt Assessment Scales – ADHD	Attention Deficit / Hyperactivity Disorder (ADHD)
Disruptive Behavior Disorder Scales (DBD)	ADHD, Oppositional Defiant Disorder, Conduct Disorder

Note. Florell (2014) cautions that each screener should be examined for fit and appropriateness prior to use.

A lack of time is commonly cited as a barrier to the expansion and provision of mental health services in schools, despite principals routinely identifying the addressing and improving of student mental health as a significant need (Iachini et al., 2016). For schools bootstrapped for time but interested in screening for the mental health needs of students, an alternative approach to UMHS exists. A brief summary of the alternative approach offered by Walker and Severson (1992) is as follows: (1) each teacher reviews their class roster for signs of externalizing (e.g., aggression, non-compliance, hyperactivity, etc.) and internalizing (e.g., withdrawal, depressed mood, shyness, etc.) behaviors, (2) each teacher identifies the top three students on their roster for each category (i.e. externalizing and internalizing), and (3) teachers complete screening tool(s) for top three students representing each category. This approach, although not necessarily universal, would

ultimately limit how much time teachers would have to allocate to screening tool completion but provide useful information about student risk for mental health concerns.

Time spent conducting UMHS may also be impacted by how often screening occurs. Although two to three screening occurrences are generally recommended per academic year, "school-based practitioners may choose to rescreen at different intervals based on initial screening results" (Dever et al., 2015, p. 627). Student screening data resulting in their placement within at-risk classifications have been found to be "largely stable across time" (Dowdy et al., 2014, p. 465), especially for students initially falling outside of any at-risk categorizations (Dever et al., 2015). Therefore, if students who are within normal limits on screening measures are only screened or included in the screening process once per year, time committed to UMHS will undoubtedly decrease.

Many educational stakeholders, including principals in the lead author's study, express concerns about a lack of support systems in place to help students identified following the conducting of UMHS. This may not be too surprising considering the national shortage of and high caseloads observed for mental health staff in schools, such as school counselors, school psychologists, and social workers (for review see Whitaker et al., n. d.). Overburdening the school's existing resources and identifying more students than staff are equipped to support are common concerns (Chafouleas et al., 2010; Dever et al., 2012). In response to concerns about being overburdened, however, it is important to recognize that conducting UMHS may not dramatically increase the number of students requiring service and support, as some students, especially externalizers, will already be on the school's mental health provider's radars (Desrochers & Houck, 2013). Initially engaging in smaller screening efforts (e.g., one grade) before full implementation is one strategy schools can adopt to test their response capabilities and improve response confidence (Moore et al., 2015). Despite these reassurances, initially building and improving upon external and internal systems of support remains a daunting task for many schools.

Forming school-community partnerships represents one-way schools can protect against internalized resource overburdening while also matching students most in need with professional support. Weist and colleagues (2020) point out few state departments of education currently offer guidance to schools on how they can successfully create partnerships and collaborate with community mental health providers to support students in need. However, the Institute for Educational Leaders, Coalition for Community Schools, and National Association of School Psychologists (NASP) partnered to create a resource aimed at assisting schools in creating meaningful community partnerships to support students' needs, which can be downloaded using the following link: https://tinyurl.com/SchoolCommunityPartners. Additionally, the National Center for School Mental Health's (2020) recent publication offers helpful links schools can use to identify mental health resources, including: the behavioral health treatment services locator sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA; https://findtreatment.samhsa.gov) and the 2-1-1, sponsored by United Way (https://www.211.org). More information about forming school-community partnerships, including action steps and tasks, along with examples of partnerships within a MTSS across tiers, can also be found in school psychology's best practices chapter coauthored by Eagle and Dowd-Eagle (2014).

Establishing, expanding upon, or making improvements to an existing MTSS within one's school is perhaps the best approach for ensuring an infrastructure is in place to support students' needs. MTSS is a "multicomponent, comprehensive, and cohesive school-wide and classroom-based positive support system through which students at risk for academic and behavioral difficulties are identified and provided with evidence-based and data-informed instruction, support, and intervention (Stoiber, 2014, p. 45). Melvin and Rodriguez (2019) offer a useful presentation containing information about how to build an MTSS from the ground up, which is accessible using the following link: http://www.schoolmentalhealth.org/media/SOM/Microsites/NCSMH/Documents/Archives/ASMH-2019/Presentations-2019/CS-3.02-Building-MTSS-from-the-Ground-Up-FINAL.pdf. MTSS training, resources, and support is also available through the Center on MTSS at the American Institutes of Research (https://mtss4success.org).

Many evidence-based interventions (EBIs) exist suitable for students presenting internalizing and/or externalizing concerns. Cognitive-behavioral interventions are frequently endorsed for students expressing or demonstrating internalizing symptoms (Weersing et al., 2017). The following packaged and manualized interventions may be considered by school personnel to support students presenting internalizing complications: *Coping Cat* (Kendall, 1990; Kendall & Hedtke, 2006), *Strong Kids* (Merrell & Gueldner, 2010), or *Support for Students Exposed to Trauma* (Jaycox et al., 2009). For students presenting externalizing concerns, many of the most efficient and effective interventions involve continual student-adult (mentor) interaction. Examples of these EBI's include but are not limited to *Check, Connect, and Expect* (Cheney et al., 2009), *Check In Check Out* (Hawken & Horner, 2003), and the *Behavior Education Program* (Crone et al., 2004). The use of daily behavioral report cards (see Iznardo et al., 2017) has also been found to be effective for students displaying characteristics of an externalizing disorder.

Teachers are key to the success of a school's MTSS efforts. They deliver tier 1 prevention programming, and, in response to the conducting of UMHS, they may be primarily responsible for or tasked with implementing targeted or intensive EBIs to the at-risk students they serve. Teachers are generally aware of this responsibility (Whitley et al., 2012), but many report being unprepared for this role and feel ill-equipped to act in response to screening data (Reinke et al., 2011; von der Embse et al., 2018). UMHS teams, during their planning meetings, would be wise to identify qualified school personnel (e.g., school psychologists, school counselors, etc.) to support teachers via coaching and/or consultation. Designated support personnel may organize and provide ongoing professional development on the topic of UMHS and be charged with compiling EBI resources. They may also support individual or groups of teachers in the selection, design, implementation, and evaluation of EBIs. Further, they can model intervention delivery and offer ongoing technical assistance and performance feedback to teachers tasked with implementing EBIs. Assuring teachers are well-support and that EBIs are implemented with a high degree of fidelity may help assist in achieving desirable student-level outcomes and equip teachers with competencies for responding to future student problems of a similar nature.

Positive Influence of UMHS

Although relatively few schools currently conduct UMHS, research is beginning to emerge suggesting positive screenings improve the chances students receive mental health services and support (Gould et al., 2009; Prochaska et al., 2016). In the study by Gould and colleagues (2009),

more than 75% of students receiving services were identified through a screening program. Student receipt of mental health services and exposure to social-emotional learning programs is connected to higher academic performance, lower emotional stress, and fewer instances of disruptive behavior (Bierman et al., 2010; Hussey, 2006). The prevention-oriented nature of UMHS in conjunction with early intervention may also result in fewer clinically significant symptoms experienced by students each academic year (Cuijpers et al., 2008).

Conclusion

Concerns about the mental health of school-aged youth continue to intensify nationwide as prevalence estimates rise and research suggests as many as one in five children and one in three adolescents have or present signs of a mental health disorder annually (Belfer, 2008; Costello et al., 2003; Merikangas et al., 2010; Whitney & Peterson, 2019; World Health Organization, 2014). The majority of school-aged children experiencing mental health problems or displaying signs and characteristics of a mental health disorder typically do not independently seek out help (Christiana et al., 2000; Robinson et al., 2011), often go undiagnosed, and are routinely untreated leaving them susceptible to poor school and life outcomes (Merikangas et al., 2010; Murphey et al., 2013; Ringel & Sturm, 2001). To combat these concerns and protect against undesirable student outcomes, schools have been and continue to be challenged to assist in the proactive identification and subsequent treatment and intervention of children with social-emotional and mental health needs.

One research endorsed and federally advocated approach suitable for school implementation to aid in the proactive identification of students experiencing or displaying characteristics of mental health disorders is UMHS (Dever et al., 2015; Dowdy et al., 2010). Despite the documented benefits of UMHS and implications of conducting UMHS in readily pairing students in need with appropriate treatment, intervention, or services, the majority of schools, historically, have not engaged in UMHS instead opting for more reactive approaches to dealing with student mental health needs (Bruhn et al., 2014; Dineen et al., 2021; Romer & McIntosh, 2005; Wood & McDaniel, 2020). Results of a recently conducted statewide survey by the lead author with principal respondents may offer insight into why the conducting UMHS remains mostly nonexistent in school settings. Principal respondents of the survey reported little to no knowledge about UMHS, were generally unaware UMHS measures exist, and reported barriers to their school conducting UMHS which are commonly cited in the literature (e.g., budgetary restrictions, a lack of support systems to support students in need, time).

One encouraging result of the survey, which inspired the current article, was the majority of principal respondents indicated moderate to extreme levels of interest in their school beginning to conduct UMHS as a means of improving identification of students who may benefit from or require mental health aid. Since principals are often gatekeepers of whether preventative practices, such as UMHS, are implemented in their school (Kam et al., 2003) and because many principals may not possess an awareness of or have much knowledge about UMHS, the current paper sought to (a) introduce principals to the topic of UMHS, (b) equip principals with UMHS resources and implementation guidance, and (c) offer principals strategies and ideas for overcoming barriers that may stand in the way of their school entertaining the idea of conducting UMHS.

Principals are an important, influential educational stakeholder group that recognize the importance of student mental health and need for improved provisions of school-based mental health services (Iachini et al., 2016). Increasing principal awareness of and knowledge about

UMHS may lead to (a) more schools beginning to conduct UMHS and (b) a narrowing of the research to practice gap that presently exists. When paired with early intervention and treatment, the conducting of UMHS holds the potential to combat an ever-increasing school-aged mental health crisis currently being observed throughout the country.

Implications for Policy and Practice

Simply improving principal awareness of and knowledge about UMHS may prove to be a necessary but significantly insufficient determinant of whether the conducting of UMHS becomes a widespread practice in schools. Macrosystemic influences and public policy initiatives typically spark or lead to systems-change at local levels (Ysseldyke et al., 2006). Presently, few states monitor the mental health outcomes of students (Eklund et al., 2021), and the majority of states have not established social-emotional learning standards (Eklund et al., 2019). Advocacy efforts by stakeholders, along with additional research that documents support for UMHS and highlights the mental health needs of students, are likely necessary for meaningful policy change to occur (Herman et al., 2021). Further, principals and building-level leaders may continue to refrain from conducting UMHS in their schools, even if they desire to, so long as resources and funding to support and service students is unavailable or insufficient. Legislation that supports increased funding aimed at heightening the presence of mental health staff (e.g., school counselors, school psychologists, social workers, etc.) in schools, along with efforts to improve guidance for how schools can create sustainable partnerships with community mental health providers, may go a long way in improving the odds for the systemic adoption of UMHS.

References

Albers, C. A., Kratochwill, T. R., & Glover, T. A. (2007). Where are we, and where do we go now?: Universal screening for enhanced educational and mental health outcomes. *Journal of School Psychology, 45,* 257-263. https://doi.org/10.1016/j.jsp.2006.12.003

Beidas, R. S., Stewart, R. E., Walsh, L., Lucas, S. Downey, M. M., Jackson, K., Fernandez, T., & Mandell, D. S. (2015). Free, brief, and validated: Standardized instruments for low-resource mental health settings. *Cognitive and Behavioral Practice, 22*, 5-19. https://doi.org/10.1016/j.cbpra.2014.02.002

Belfer, M. L. (2008). Child and adolescent mental disorders: The magnitude of the problem across the globe. *Journal of Child Psychology and Psychiatry, 49*(3), 226–236. https://doi.org/10.1111/j.1469-7610.2007.01855.x

Bierman, K. L., Coie, J. D., Dodge, K. A., Greenberg, M. T., Lochman, J. E., McMahon, R. J., & Pinderhughes, E. (2010). The effects of a multiyear universal social-emotional learning program: The role of student and school characteristics. *Journal of Consulting and Clinical Psychology, 78*, 156–168. https://doi.org/10.1037/a0018607

Bradford, S., & Rickwood, D. (2015). Young people's views on electronic mental health assessment: Prefer to type than talk? *Journal of Child and Family Studies, 24*(5), 1213–1221. https://doi.org/10.1007/s10826-014-9929-0

Bradley, R., Doolittle, J., & Bartolotta, R. (2008). Building on the data and adding to the discussion: The experiences and outcomes of students with emotional disturbance. *Journal of Behavioral Education, 17*(1), 4-23. https://doi.org/10.1007/s10864-007-9058-6

Briesch, A. M., Chafouleas, S. M., & Chaffee, R. K. (2017). Analysis of state-level guidance regarding school-based universal screening for social, emotional, and behavioral risk. *School Mental Health, 10*, 147-162. https://doi.org/10.1007/s12310-017-9232-5

Bruhn, A. L., Woods-Groves, S., & Huddle, S. (2014). A preliminary investigation of emotional and behavioral screening practices in K-12 schools. *Education and Treatment of Children, 37*(4), 611–634. https://doi.org/10.1353/etc.2014.0039

Burns, B. J., Costello, E. J., Angold, A., Tweed, D., Stangl, D., Farmer, E. M. Z, & Erkanli, A. (1995). Children's mental health service use across service sectors. *Health Affairs, 14*(3), 147–159. https://doi.org/10.1377/hlthaff.14.3.147

Castillo, J. M., & Curtis, M. J., (2014). Best practices in systems-level change. In P. L. Harrison & A. Thomas (Eds.), *Best practices in school psychology: Systems-level services* (pp. 11-28). Bethesda, MD: National Association of School Psychologists.

Centers for Disease Control and Prevention. (2019). *Youth risk behavior survey: Data summary & trends report 2007-2017.* *https://www.cdc.gov/healthyyouth/data/yrbs/pdf/trendsreport.pdf*

Center for School Mental Health. (2018). *School Mental Health Screening Playbook: Best Practices and Tips from the Field*. https://www.azahcccs.gov/AHCCCS/Downloads/Initiatives/BehavioralHealthServices/Helios/Tucson_09252019/ToolkitResource/School-Mental-Health-Screening-Playbook.pdf

Chafouleas, S. M., Kilgus, S. P., & Wallach, N. (2010). Ethical dilemmas in school-based behavioral screening. *Assessment for Effective Intervention*, *35*, 245–252. https://doi.org/10.1177/1534508410379002

Chartier, M., Stoep, A. V., McCauley, E., Herting, J. R., Tracy, M., & Lymp, J. (2008). Passive versus active parental permission: Implications for the ability of school-based depression screening to reach youth at risk. *Journal of School Health, 78*(3), 157-164. https://doi.org/10.1111/j.1746-1561.2007.00278.x

Cheney, D., Stage, S. A., Hawken, L. S., Lynass, L., Mielenz, C., & Waugh, M. (2009). A 2-year outcome study of the check, connect, and expect intervention for students at risk for severe behavior problems. *Journal of Emotional and Behavioral Disorders*, *17*, 226–243. https://doi.org/10.1177/1063426609339186

Christiana, J. M., Gilman, S. E., Guardino, M., Mickelson, K., Morselli, P. L., Olfson, M., & Kessler, R. (2000). Duration between onset and time of obtaining initial treatment among people with anxiety and mood disorders: An international survey of members of mental health patient advocate groups. *Psychological Medicine, 30*, 693–703. https://doi.org/10.1017/S0033291799002093

Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorder in childhood and adolescence. *Archives of General Psychiatry, 60*(8), 837-844. https://doi.org/10.1001/archpsyc.60.8.837

Crone, D. A., Horner, R. H., & Hawken, L. S. (2004). *Responding to problem behavior in schools: The behavior education program*. New York, NY: Guilford.

Cuijpers, P., van Straten, A., Smit, F., Mihalopoulos, C., & Beekman, A. (2008). Preventing the onset of depressive disorders: A meta-analytic review of psychological interventions. *American Journal of Psychiatry,165*, 1272–1280. https://doi.org/10.1176/appi.ajp.2008.07091422

Deighton, J., Tymms, P., Vostanis, P., Belsky, J., Fonagy, P., Brown, A., Martin, A., Patalay, P., & Wolpert, M. (2012). The development of a school-based measure of child mental health. *Journal of Psychoeducational Assessment, 31*(3), 247–257. https://doi.org/10.1177/0734282912465570

De Los Reyes, A., Augenstein, T. M., Wang, M., Thomas, S. A., Deborah, A. G., Burgers, D. E., & Rabinowitz, J. (2015). The validity of the multi-informant approach to assessing child and adolescent mental health. *Psychological Bulletin, 141*(4), 858-900. https://doi.org/10.1037/a0038498

Desrochers, J. E., & Houck, G. M. (2013). *Depression in children and adolescents: Guidelines for school practice*. Silver Spring, MD: National Association of School Nurses.

Dever, B. V, Dowdy, E., Raines, T. C., & Carnazzo, K. (2015). Stability and change of behavioral and emotional screening scores. *Psychology in the Schools, 52*(6), 618–629. https://doi.org/10.1002/pits.21825

Dever, B.V., Raines, T.C., & Barclay, C.M. (2012). Chasing the unicorn: Practical implementation of universal screening for behavioral and emotional risk. *School Psychology Forum, 6*(4), 108-118.

Dever, B. V., & Raines, T. C. (2013). The use of student self-report screening data for mental health risk surveillance. https://eric.ed.gov/?id=ED564078

Dineen, J. N., Chafouleas, S. M., Briesch, A. M., McCoach, D. B., Newton, S. D., & Clintron, D. W. (2021). Exploring social, emotional, and behavioral screening approaches in U.S. public school districts. *American Educational Research Journal*. https://doi.org/10.3102/00028312211000043

Doll, R., & Cummings, J. (2008). Why population-based services are essential for school mental health, and how to make them happen in school. In B. Doll, & J. Cummings (Eds.) *Transforming school mental health services: Population-based approaches to promoting the competency and wellness of children.* Thousand Oaks: Corwin Press.

Dowdy, E., Furlong, M. J., Nylund-Gibson, K., Moore, S., & Moffa, K. (2018). Initial validation of the social emotional distress survey – Secondary to support complete mental health screening. *Assessment for Effective Intervention, 43*(4), 241-248. https://doi.org/10.1177/1534508417749871

Dowdy, E., Furlong, M. J., Raines, T., Bovery, B., Kauffman, B., Kamphaus, R., & Murdock, J. (2015). Enhancing school-based mental health services with a preventive and promotive approach to universal screening for complete mental health. *Journal of Educational and Psychological Consultation, 25*, 1–20. https://doi.org/10.1080/10474412.2014.929951

Dowdy, E., Furlong, M. J., & Sharkey, J. D. (2012). Using surveillance of mental health to increase understanding of youth involvement in high risk behaviors: A value added analysis. *Journal of Emotional and Behavioral Disorders, 21*(1), 33-44. https://doi.org/10.1177/1063426611416817

Dowdy, E., & Kim, E. (2012). Choosing informants when conducting a universal screening for behavioral and emotional risk. *School Psychology Forum, 6*(4), 98–107.

Dowdy, E., Nylund-Gibson, K., Felix, E., Morovati, D., Carnazzo, K. W., & Dever, B. V. (2014). Long-term stability of screening for behavioral and emotional risk. *Educational and Psychological Measurement, 74*(3), 453–472. https://doi.org/10.1177/0013164413513460

Dowdy, E., Ritchey, K., & Kamphaus, R. W. (2010). School-based screening: A population-based approach to inform and monitor children's mental health needs. *School Mental Health, 2,* 166-176. https://doi.org/10.1007/s12310-010-9036-3

Eagle, J. W., & Dowd-Eagle, S. E. (2014). Best practices in school-community partnerships. In P. L. Harrison & A. Thomas (Eds.), *Best practices in school psychology: Systems-level services* (pp. 197-210). Bethesda, MD: National Association of School Psychologists.

Eagle, J. W., Shannon, E., Dowd-Eagle, S. E., Snyder, A., & Holtzman, E. G. (2015). Implementing a multi-tiered system of support (MTSS): Collaboration between school psychologists and administrators to promote systems-level change. *Journal of Educational and Psychological Consultation, 25,* 160-177. https://doi.org/10.1080/10474412.2014.929960

Eklund, K., & Dowdy, E. (2014). Screening for behavioral and emotional risk versus traditional school identification methods. *School Mental Health, 6,* 40-49. https://psycnet.apa.org/doi/10.1007/s12310-013-9109-1

Eklund, K., & Kilgus, S. (2015, November). Universal screening to inform interventions for behavioral and emotional concerns. Session presented at Ohio School Psychology Association Fall Conference, Columbus, OH. Retrieved from https://www.ospaonline.org/index.php/practitioners/conferences/event-info/50-conference-handouts/562-fall-2015-conference

Eklund, K., & Rossen, E. (2016). *Guidance for Trauma Screening in Schools*. https://www.nasponline.org/x37269.xml

Eklund, K., Godfrey, E., Wadington, M., Chalnick, H., Gill, N., & Dodge, S. (2021). *A systematic review of state school mental health policies & practices* [Conference session]. National Association of School Psychologists 2021 Annual Convention.

Eklund, K., Kilpatrick, K. D., Kilgus, S., & Haider, A. (2019). A systematic review of state-level social-emotional learning standards: Implications for practice and research. *School Psychology Review, 47*(3), 316-326. https://doi.org/10.17105/SPR-2017.0116.V47-3

Essex, M. J., Kraemer, H. C., Slattery, M. J., Burk, L. R., Boyce, W. T., Woodward, H. R., & Kupfer, D. J. (2009). Screening for childhood mental health problems: Outcomes and early identification. *Journal of Child Psychology and Psychiatry, 50*(5), 562–570. https://doi.org/10.1111/j.1469-7610.2008.02015.x

Fan, X., Miller B., Park, K., Winward, B., Christensen, M., Grotevant, H., & Tai, R. (2006). An exploratory study about inaccuracy and invalidity in adolescent self-report surveys. *Field Methods, 18*, 223-244. https://doi.org/10.1177/152822X06289161

Fernandez, B. S., & Vaillancourt, K. M. (2013). Supporting mental health: Use your school psychologist to provide a multitiered system of support. *Principal, 93*(2), 12-15.

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). Implementation research: A synthesis of the literature. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231). https://nirn.fpg.unc.edu/sites/nirn.fpg.unc.edu/files/resources/NIRN-MonographFull-01-2005.pdf

Florell, D. (2014). Just a click away. *Communiqué, 43*(1), 37.

Glover, T., & Albers, C. (2007). Considerations for evaluating universal screening assessments. *Journal of School Psychology, 45*, 117–135. https://doi.org/10.1016/j.jsp.2006.05.005

Goodman-Scott, E., Donohue, P., & Betters-Bubon, J. (2019). The case for universal mental health screening in schools. *Counseling Today, 62*(3), 40-45. https://ct.counseling.org/2019/09/the-case-for-universal-mental-health-screening-in-schools/

Gould, M. S., Marrocco, F. A., Hoagwood, K., Kleinman, M., Amakawa, L., & Altschuler, E. (2009). Service use by at-risk youths after school-based suicide screening. *Journal of the American Academy of Child and Adolescent Psychiatry, 48*(12), 1193–1201. https://doi.org/10.1097/CHI.0b013e3181bef6d5

Han, S. S., & Weiss, B. (2005). Sustainability of teacher implementation of school-based mental health programs. *Journal of Abnormal Child Psychology, 33*, 665-679. https://doi.org/10.1007/s10802-005-7646-2

Hawken, L. S., & Horner, R. H. (2003). Evaluation of a targeted group intervention within a school-wide system of behavior support. *Journal of Behavioral Education*, *12*, 225–240. https://doi.org/10.1023/A:1025512411930

Herman, K. C., Reinke, W. M., Thompson, A. M., Hawley, K. M., Wallis, K., Stormont, M., & Peters, C. (2021). 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. https://doi.org/10.1080/2372966X.2020.1827682

Huskey, M. M., Sheridan, M., McGuire, L., & Olfson, M. (2011). Mental health screening and follow-up care in public high schools. *Journal of the American Academy of Child and Adolescent Psychiatry, 50*(9), 881–891. https://doi.org/10.1016/j.jaac.2011.05.013

Hussey, D. (2006). Risk status and differential effectiveness of urban school-based mental health services. In C. Newman, C. Liberton, K. Kutash, & R. Friedman (Eds.), *The19th Annual Research Conference Proceedings: A System of Care for Children's Mental Health, Expanding the Research Base (March 6 to March 9, 2005)* (pp. 219-221). Tampa, FL: The Louis de la Parte Florida Mental Health Institute, University of South Florida, Research and Training Center for Children's Mental Health.

Iachini, A. L., Pitner, R. O., Morgan, F., & Rhodes, K. (2016). Exploring the principal perspective: Implications for expanded school improvement and school mental health. *Children & Schools*, *38*(1), 40–48. https://doi.org/10.1093/cs/cdv038

Iznardo, M., Rogers, M. A., Volpe, R. J., Labelle, P. R., & Robaey, P. (2017). The effectiveness of daily behavior report cards for children with ADHD: A meta-analysis. *Journal of Attention Disorders, 83*, 1–14. https://doi.org/10.1177/1087054717734646

Jaycox, L., Langley, A., & Dean, K. L. (2009). *Support for students exposed to trauma: The SSET program*. Santa Monica, CA: RAND Corporation.

Jenkins, L. N., Demaray, M. K., Wren, N. S., Secord, S. M., Lyell, K. M., Magers, A. M., Tennant, J. (2014). A critical review of five commonly used social-emotional and behavioral screeners for elementary or secondary schools. *Contemporary School Psychology*, *18*(4), 241–254. https://doi.org/10.1007/s40688-014-0026-6

Jeuchter, J. I., Dever, B. V., & Kamphaus, R. W. (2012). Mental health screening and academic outcomes in elementary school. *School Psychology Forum, 6*(4), 137-147.

Kam, C. M., Greenberg, M. T., & Walls, C. T. (2003). Examining the role of implementation quality in school-based prevention using the PATHS curriculum. Promoting alternative Thinking skills curriculum. *Prevention Science, 4*(1), 55-53. https://www.ncbi.nlm.nih.gov/pubmed/12611419

Kamphaus, R. W., & Reynolds, C. R. (2007). BASC-2 Behavioral and Emotional Screening System. Minneapolis, MN: Pearson.

Kendall, P. C. (1990). *Coping cat workbook*. Ardmore, PA: Workbook Publishing.

Kendall, P. C., & Hedtke, K. (2006). Coping Cat workbook. (2nd ed). Ardmore, PA: Workbook Publishing.

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*(6), 593-602. https://doi.org/10.1001/archpsyc.62.6.593

Koller, J. R., & Bertel, J. M. (2006). Responding to today's mental health needs of children, families and schools: Revisiting the preservice training and preparation of school-based personnel. *Education and Treatment of Children*, *29*(2), 197-217. https://www.jstor.org/stable/42899882

Lane, K. L., Menzies, H. M., Oakes, W. P., & Kalberg, J. R. (2012). Systematic screenings of behavior to support instruction: From preschool to high school. New York, NY: Guilford Press.

Levitt, J. M., Saka, N., Romanelli, L. H., & Hoagwood, K. (2007). Early identification of mental health problems in schools: The status of instrumentation. *Journal of School Psychology, 45*(2), 163-191. https://doi.org/10.1016/j.jsp.2006.11.005

Loeber, R., Green, S. M., Lahey, B. B., & Stouthamer-Loeber, M. (1991). Differences and similarities between children, mothers, and teachers as informants on disruptive child behavior. *Journal of Abnormal Child Psychology, 19*, 75−95. https://doi.org/10.1007/BF00910566

Logan, D. E., & King, C. A. (2002). Parental identification of depression and mental health service use among depressed adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry,41*(3), 296−304. https://doi.org/10.1097/00004583-200203000-00009

Melvin, M., & Rodriguez, L. M. (2019). *Building MTSS from the ground (tier 1) up: Practical strategies and impact findings, including a significant reduction of discipline referrals* [Presentation]. Meadows Mental Health Policy Institute. http://www.schoolmentalhealth.org/media/SOM/Microsites/NCSMH/Documents/Archives/ASMH-2019/Presentations-2019/CS-3.02-Building-MTSS-from-the-Ground-Up-FINAL.pdf

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. https://doi.org/10.1016/j.jaac.2010.05.017

Merikangas, K. R., He, J. P., Burstein, M., Swendsen, J., Avenevoli, S., Case, B., Georgiades, K., Heaton, L., Swanson, S., & Olfson, M. (2011). Service utilization for lifetime mental disorders in US adolescents: Results of the National Comorbidity Survey−Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry, 50*(1), 32–45. https://doi.org/10.1016/j.jaac.2010.10.006

Merrell, K. W., & Gueldner, B. A. (2010). Preventative interventions for students with internalizing disorders: Effective strategies for promoting mental health in schools. In M. R. Shinn & H. M. Walker (Eds.), *Interventions for achievement and behavior in a three-tier model including RTI* (3rd ed., pp. 729–823). Bethesda, MD: National Association of School Psychologists.

Moore, S. A., Mayworm, A. M., Stein, R., Sharkey, J. D., & Dowdy, E. (2019). Languishing students: Linking complete mental health screening in schools to tier 2 intervention. *Journal of Applied School Psychology, 35*(3), 257-289. https://doi.org/10.1080/15377903.2019.1577780

Moore, S. A., Widales-Benitez, O., Carnazzo, K. W., Kim, E. K., Moffa, K., & Dowdy, E. (2015). Conducting universal complete mental health screening via student self-report. *Contemporary School Psychology,* 19(4), 253–267. https://doi.org/10.1007/s40688-015-0062-x

Murphey, D., Vaughn, B., & Barry, M. (2013). Access to mental health care. https://www.childtrends.org/wp-content/uploads/2013/04/Child_Trends-2013_01_01_AHH_MHAccessl.pdf

National Center for School Mental Health (NCSMH, 2020). *School Mental Health Quality Guide: Impact.* NCSMH, University of Maryland School of Medicine.

National Center for School Mental Health (NCSMH, 2020). *School Mental Health Quality Guide: Screening.* NCSMH, University of Maryland School of Medicine.

O'Connell, M., Boat, T., & Warner, K. (2009). *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities.* Washington, DC: National Academies Press.

O'Connor, E. P., & Freeman, E. W. (2012). District-level considerations in supporting and sustaining RTI implementation. *Psychology in the Schools, 49*(3), 297-310. https://doi.org/10.1002/pits.21598

Ohio Department of Education. (2016). School-wide universal screening for behavioral and mental health issues: Implementation guidance. https://education.ohio.gov/getattachment/Topics/Other-Resources/School-Safety/Building-Better-Learning-Environments/PBIS-Resources/Project-AWARE-Ohio/Project-AWARE-Ohio-Statewide-Resources/Screening-Guidance-Document-Final.pdf

Parisi, D. M., Ihlo, T., & Glover, T. A. (2014). Screening within a multitiered early prevention model: Using assessment to inform instruction and promote students' response to intervention. In R. J. Kettler, T. A. Glover, C. A. Albers, & K. A. Feeney-Kettler (Eds.), *Universal screening in educational settings: Evidence-based decision making for schools* (pp.19–46). Washington, DC: American Psychological Association. https://doi.org/10.1037/14316-002

Prochaska, J., Le, V., Baillargeon, J., & Temple, J. (2016). Utilization of professional mental health services related to population-level screening for anxiety, depression, and post-traumatic stress disorder among public high school students. *Community Mental Health Journal, 52*(6), 691-700. https://doi.org/10.1007/s10597-015-9968-z

Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. *School Psychology Quarterly, 26*(1), 1-13. https://doi.org/10.1037/a0022714

Renshaw, T. L., Furlong, M. J., Dowdy, E., Rebelez, J., Smith, D. C., O'Malley, M. D., Strom, I. F. (2014). Covitality: A synergistic conception of adolescents' mental health. In M. J. Furlong, R. Gilman, & E. S. Huebner (Eds.), *Handbook of positive psychology in the schools* (2nd ed., pp. 12-32). New York, NY: Routledge.

Ringel, J., & Sturm, R. (2001). National estimates of mental health utilization and expenditure for children in 1998. *Journal of Behavioral Health Services and Research, 28*(3), 319-332. https://doi.org/10.1007/BF02287247

Robinson, J., Pan Yuen, H., Martin, C., Hughes, A., Baksheev, G. N., Dodd, S., Bapat, S., Schwass, W., McGorry, P., & Yung, A. R. (2011). Does screening high school students for psychological distress, deliberate self-harm, or suicidal ideation cause distress – And is it acceptable? An Australian-based study. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 32*(5), 254-263. https://psycnet.apa.org/doi/10.1027/0227-5910/a000087

Romer, D., & MacIntosh, M. (2005). The roles and perspectives of school mental health professionals in promoting adolescent mental health. In D. L. Evans, E. M. Foa, R. E. Gur, H. Hendin, C. P. O'Brien, M. E. P. Seligman, & B. T. Walsh (Eds.), *Treating and Preventing Adolescent Mental Health Disorders: What we Know and What we Don't Know* (pp. 598-615). New York: Oxford University Press.

Romer, N., von der Embse, N., Eklund, K., Kilgus, S., Perales, K., Splett, J. W., Suldo, S., & Wheeler, D. (2020). Best Practices in Social, Emotional, and Behavioral screening. An Implementation Guide. Version 2.0. https://smhcollaborative.org/universalscreening

Schwean, V., & Rodger, S. (2013). Children first: It's time to change! Mental health promotion, prevention, and treatment informed by public health, and resiliency approaches. *Canadian Journal of School Psychology*, *28*, 136-166. https://doi.org/10.1177/0829573513475773

Severson, H. H., Walker, H. M., Hope-Doolittle, J., Kratochwill, T. R., & Gresham, F. M. (2007). Proactive, early screening to detect behaviorally at-risk students: issues, approaches, emerging innovations, and professional practices. *Journal of School Psychology, 45*(2), 193–223. https://doi.org/10.1016/j.jsp.2006.11.003

Splett, J. W., Trainor, K. M., Raborn, A., Halliday-Boykins, C. A., Garzona, M. E., Dongo, M. D., & Weist, M. D. (2018). Comparison of universal mental health screening to students already receiving intervention in a multitiered system of support. *Behavioral Disorders*, *43*(3), 344-356. https://doi.org/10.1177/0198742918761339

Stoiber, K. C. (2014). A comprehensive framework for multitiered systems of support in school psychology. In P. L. Harrison & A. Thomas (Eds.), *Best practices in school psychology: Data-Based and Collaborative Decision Making* (pp. 41-70). Bethesda, MD: National Association of School Psychologists

Substance Abuse and Mental Health Services Administration. (2019). Ready, Set, Go, Review: Screening for Behavioral Health Risk in Schools. https://www.samhsa.gov/sites/default/files/ready_set_go_review_mh_screening_in_schools_508.pdf

Suldo, S. M., Thalji-Raitano, A., Kiefer, S. M., & Ferron, J. M. (2016). Conceptualizing high school students' mental health through a dual-factor model. *School Psychology Review, 45*(4), 434-457. https://doi.org/10.17105/SPR45-4.434-457

Taylor, H. G., Anselmo, M., Foreman, A. L., Schatschneider, C., & Angelopoulos, J. (2000). Utility of kindergarten teacher judgments in identifying early learning problems. *Journal of Learning Disabilities*, *33*(2), 200-210. https://doi.org/10.1177/002221940003300208

von der Embse, N. P., Kilgus, S. P., Eklund, K., Ake, E., & Levi-Neilsen, S. (2018). Training teachers to facilitate early identification of mental and behavioral health risks. *School Psychology Review, 47*(4), 372-384. https://doi.org/10.17105/SPR-2017-0094.V47-4

Waldron, N. L., & McLeskey, J. (2010). Establishing a collaborative school culture through comprehensive school reform. *Journal of Educational and Psychological Consultation, 20,* 58-74. https://doi.org/10.1080/10474410903535364

Walker, B. A. (2010). Effective schoolwide screening to identify students at risk for social and behavioral problems. *Intervention in School and Clinic, 46*(2), 104-110: https://doi.org/10.1177/1053451210374989

Walker, H. M., & Severson, H. H. (1992). Systematic screening for behavior disorders (2nd ed.). Longmont, CO: Sopris West.

Walker, H. M., Small, J. W., Severson, H. H., Seeley, J. R., & Feil, E. G. (2014). Multiple-gating approaches in universal screening within school and community settings. In R. J. Kettler, T. A. Glover, C. A. Albers, & K. A. Feeney-Kettler (Eds.), *Universal screening in educational settings: Evidence-based decision making for schools* (pp. 47–75). Washington, DC: American Psychological Association. https://doi.org/10.1037/14316-003

Weersing, V. R., Jeffreys, M., Do, M. C. T., Schwartz, K. T., & Bolano, C. (2017). Evidence base update of psychosocial treatments for child and adolescent depression. *Journal of Clinical Child & Adolescent Psychology*, *46*, 11–43. https://doi.org/10.1080/15374416.2016.1220310

Weist, M. D. & Paternite, C. (2006). Building an interconnected policy-training-practice-research agenda to advance school mental health. *Education & Treatment of Children, 29*(2), 173-196. https://www.jstor.org/stable/42899881

Weist, M. D., Franke, K. B., Lucio, R., Bass, J., Doan, T., & Blalock, D. (2020). Privatization and school mental health. *Journal of Public Mental Health, 19*(2), 99-107. https://doi.org/10.1108/JPMH-06-2019-0065

Weist, M. D., Rubin, M., Moore, E., Adelshem, S., & Wrobel, G. (2007). Mental health screening in schools. *Journal of School Health, 77*, 53–58. https://doi.org/10.1111/j.1746-1561.2007.00167.x

Whitaker, A., Torres-Guillén, S., Morton, M., Jordan, H., Coyle, S., Mann, A., & Sun, W. (n. d.). *Cops and no counselors: How the lack of school mental health staff is harming students*. https://www.aclu.org/sites/default/files/field_document/030419-acluschooldisciplinereport.pdf

Whitley, J., Smith, J. D., & Vaillancourt, T. (2012). Promoting mental health literacy among educators. Critical in school-based prevention and intervention. *Canadian Journal of School Psychology, 28*(1), 56-70. https://doi.org/10.1177/0829573512468852

Whitney, D. G., & Peterson, M. D. (2019). US national and state-level prevalence of mental health disorders and disparities of mental health care use in children. *JAMA Pediatrics, 173*(4), 389-391. https://doi.org/10.1001/jamapediatrics.2018.5399

Wood, B. J., & McDaniel, T. (2020). A preliminary investigation of universal mental health screening practices in schools. *Children and Youth Services Review, 112*, 1-5. https://doi.org/10.1016/j.childyouth.2020.104943

World Health Organization. (2014). *Mental health: A state of well-being*. http://www.who.int/features/factfiles/mental_health/en/

Ysseldyke, J. E., Burns, M., Dawson, P., Kelley, B., Morrison, D., Ortiz, S., Rosenfield, S., &
Telzrow, C. (2006). *School psychology: A blueprint for training and practice III.*
Bethesda, MD: National Association of School Psychologists.
https://www.naspcenter.org/blueprint/FinalBlueprintInteriors.pdf